aws

Upgrade Guide

AWS Elemental Live

AWS Elemental Live: Upgrade Guide

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About this guide

This guide describes how to upgrade or downgrade the software running on an AWS Elemental Live node.

It applies to the following changes:

- Upgrades to any version up to 2.25.

- Downgrades to any version when the currently installed version is any version up to 2.25.

Upgrade scenarios

The Elemental Live node might be running in stand-alone, or it might be a member of an AWS Elemental Conductor Live cluster. The following table identifies the guide to read for your deployment.

Deployment type	Description	Guide
Stand-alone deployments	Elemental Live nodes are not in a cluster controlled by AWS Elemental Conductor Live.	This guide.
Single Conductor cluster, no worker redundancy	Elemental Live nodes *without* backup worker nodes in a cluster controlled by one AWS Elemental Conductor Live node.	AWS Elemental Conductor Live Upgrade Guide
Single Conductor cluster with worker redundancy	Elemental Live nodes *with* one or more backup worker nodes in a cluster controlled by one AWS Elemental Conductor Live node.	AWS Elemental Conductor Live Upgrade Guide
High-availability cluster, no worker redundancy	Elemental Live nodes *without* backup worker nodes in a cluster controlled by two AWS	AWS Elemental Conductor Live Upgrade Guide

Deployment type	Description	Guide
	Elemental Conductor Live nodes.	
High-availability cluster, with worker redundancy	Elemental Live nodes *with* backup worker nodes, in a cluster controlled by two AWS Elemental Conductor Live nodes (a primary and a backup).	[AWS Elemental Conductor Live Upgrade Guide](#)

Prerequisite knowledge

We assume that you know how to:

- Connect to the Elemental Live web interface using your web browser.
- Log in to a remote terminal (Linux) session in order to work via the command line interface.

> ⓘ **Note**
>
> For assistance with your AWS Elemental appliances and software products, see the [AWS Elemental Support Center](#).

Sending commands

- Unless otherwise stated, enter all Linux shell commands from the home directory (/home/ elemental).
- To ensure that the commands are executed regardless of your user permissions, use "sudo" to run the command as a superuser.

Upgrades in Elemental Live

This section describes how to upgrade to AWS Elemental Live software version to a higher version.

Upgrade rules

The following rules apply when you're upgrading Elemental Live software.

- Your system must be in a working state prior to the upgrade. If it's in a degraded state (such as not accepting events or not responding through the web interface), the upgrade fails.

- You can upgrade to a version that's a maximum of two major versions above your current version. For example, from 2.23.5 to 2.25.4. (The number of minor versions between the two major versions is irrelevant.)

- To upgrade over a bigger span, you must perform the upgrade in several steps. For example, you might upgrade from version 2.22.5 to 2.23.5, then to 2.25.4.

> ⚠️ **Important**
>
> Plan to upgrade during a maintenance window. All activity on the nodes stops during upgrade.

> ℹ️ **Note**
>
> In this procedure, we show how to upgrade Elemental Live from version 2.23.5 to version 2.25.4. Modify your commands to specify the version that you are upgrading to.

Topics

- [Step A: Get ready to upgrade](#)
- [Step B: Kickstart the operating system software](#)
- [Step C: Copy the AWS Elemental Live installer](#)
- [Step D: Upgrade the Elemental Live software](#)
- [Step E: Restore the database](#)

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Step A: Get ready to upgrade

The following steps prepare you for upgrading. Perform these steps to ensure that you don't lose any data during the upgrade process.

Check essential notes

To identify changes in behavior with the upgrade, see the essential notes in the current Release Notes.

Verify the worker type

The software installer that you use for the nodes varies depending on whether you have GPU-accelerated software type or CPU-only. To determine the type of software, look at any web interface screen of the worker node. The top shows one or two icons as follows:

- CPU and GPU icons: the software is *GPU-accelerated*.
- CPU icon only: the software is *CPU-only*.

Step B: Kickstart the operating system software

Your upgrade might require that you re-install (kickstart) the operating system. You might decide on your own that you want to kickstart, or AWS Elemental Support might recommend that you kickstart to attempt to solve a problem.

Create a bootable kickstart

To upgrade the operating system, you need a kickstart file (`.iso`) file. For example, `centos-20161028T12270-production-usb.iso`. You use this file to put a preconfigured installation of your operating system on your physical hardware unit.

1. Identify the version of the operating system that corresponds to this version of Elemental Live. The correct `.iso` file is available at AWS Elemental Support Center Activations.
2. At your workstation, use a third-party utility (such as PowerISO or ISO2USB) to create a bootable USB drive from your `.iso` file. For help, see this knowledge base article.

Save the latest backup

When you upgrade the operating system, your previous database backups are deleted. Locate and save the most recent backup off the system. You can use this backup later if you need to downgrade back to this version.

To save the latest backup

1. From a Linux prompt, log in to the hardware unit with the *elemental* user credentials.

2. Navigate to the directory where Elemental Live saves its backups.

   ```
   [elemental@host ~]$ cd /home/elemental/database_backups
   ```

3. Locate the most recent backup and save it to a location off the AWS Elemental node. The backup name includes the date and time that the backup was taken, in this format:

   ```
   /home/elemental/elemental-db-backup_<version>_<date>.tar
   ```

   For example:

   ```
   /home/elemental/elemental-db-backup_live_2.23.5_2021-02-08_21-01-36.tar
   ```

Upgrade the operating system

Install the operating system on the node.

To kickstart the system

1. Insert the USB thumb drive into the hardware unit.

2. Restart the system using the following command.

   ```
   [elemental@hostname ~]$ sudo reboot
   ```

3. Use the arrow keys to select each option and complete the field, using the instructions in the following table as a guide.

Menu Option	Instructions
`Set Hostname`	Change the hostname to a useful name such as **`live-01`** or **`live-chicago-01`** . Do not use **`localhost`** as the hostname. Do not use periods or underscores in the hostname.
`Disk layout: Auto-detect`	Keep this set to `Auto-detect` .
`Set Key`	Arrow down to skip this option.
`Install and configure base operating system`	Press **Enter** to begin the OS installation.

The operating system is installed.

4. At the `Press return to quit` prompt, press **Enter** to reboot the system.

Step C: Copy the AWS Elemental Live installer

1. From your regular workstation, open a web browser, go to AWS Elemental Support Center Activations and download the software for the version that you're going to.

2. Make a note of where downloads are stored on your workstation. For example:

```
h:/corporate/downloads/.
```

3. Make a note of the name of the download file. For example:
   `elemental_production_live_2.25.4.12345.run`

4. Copy the download file from your workstation to `/home/elemental/` on one of the nodes. For example:

   - Use SFTP protocol and an FTP client application on your workstation computer. Connect to the IP address for Elemental Live on port 22 with the *elemental* user credentials and transfer the file.

- Use SCP protocol and an SCP client application on your workstation computer. Copy the file with the *elemental* user credentials and transfer the file.

5. Repeat the download to any other nodes that are changing versions. If you're changing versions on several nodes, copy the download file to every hardware unit at once. Doing so reduces downtime on each node as you start installing the new software.

For detailed downloading steps, see *Reference: Downloading software*.

Step D: Upgrade the Elemental Live software

These steps must be performed on the Elemental Live hardware unit.

There are two procedures for upgrading a node. Choose the procedure that applies to your deployment.

Topics

- Upgrade without change
- Upgrade and change deployment

Upgrade without change

To upgrade a node without changing the deployment

Follow this procedure if you don't need to change anything about the deployment.

1. From a Linux prompt, log in with the *elemental* user credentials. Once you're logged in, the initial directory is /home/elemental.

2. Run the installer with the skip-all option:

   - For GPU and CPU versions of the software.

     ```
     [elemental@hostname ~]$ sudo sh ./elemental_production_live_2.25.4.12345.run --
     skip-all --start
     ```

   - For CPU-only versions of the software.

```
[elemental@hostname ~]$ sudo sh ./elemental_production_live_cpu_2.25.4.12345.run
 --skip-all --start
```

The installer automatically stops the software, if it's still running. The following prompts are skipped:

- You are not prompted to change the network setup (eth0 and eth1) or the Ethernet partitioning (setup of eth0 as a management interface).

- You are not prompted to choose the time zone.

- You are not prompted to enable or disable user authentication.

You *are* prompted to accept the EULA (end user license agreement).

The new software is installed and all services except `elemental_se` are automatically be restarted.

3. Once installation is complete, you might be prompted to reboot.

```
Installation and configuration complete!
.
.
.
NOTE: You must reboot your system to finish the installation!
```

Enter this command to reboot:

```
[elemental@hostname ~]$ sudo reboot
```

The reboot takes approximately 5 minutes. When the reboot completes, the elemental _se service automatically starts. Look for this message on the command line:

```
Starting elemental_se: [ OK ]
```

4. If you're not prompted to reboot, you are prompted to start elemental_se:

```
Would you like to start the Elemental service now? [Y]
```

Enter **Y**.

The restart takes approximately 1 minute. When the restart is done, this message appears:

```
Installation and configuration complete!
Please open a web browser and point it to http://xxx.xxx.xxx.xxx to get to the web
 interface.
Enjoy!
```

5.   Refresh your web browser to load the updated Elemental Live web interface.

Upgrade and change deployment

To upgrade a node and change the deployment

Follow this procedure if you want to change something in the deployment. Specifically, follow this procedure if you want to enable OCR conversion for the first time. This feature is available in AWS Elemental Live version 2.22.0 and later. (For information about this feature, see Support for OCR Conversion in the *AWS Elemental Live User Guide*.)

1.   Follow the appropriate procedure in the *AWS Elemental Live Installation Guide*:

- Install the AWS Elemental Live software: to install on hardware

- Install the AWS Elemental Live software: to install on a VM

2.   Once installation is complete, you might be prompted to reboot.

```
Installation and configuration complete!
.
.
.
NOTE: You must reboot your system to finish the installation!
```

Enter this command to reboot:

```
[elemental@hostname ~]$ sudo reboot
```

The reboot takes approximately 5 minutes. When the reboot completes, the elemental _se service automatically starts. Look for this message on the command line:

```
Starting elemental_se: [ OK ]
```

3. If you're not prompted to reboot, you are prompted to start elemental_se:

```
Would you like to start the Elemental service now? [Y]
```

Enter **Y**.

The restart takes approximately 1 minute. When the restart is done, this message appears:

```
Installation and configuration complete!
Please open a web browser and point it to http://xxx.xxx.xxx.xxx to get to the web
 interface.
Enjoy!
```

4. Refresh your web browser to load the updated Elemental Live web interface.

Step E: Restore the database

If you upgraded the operating system, you should have backed up the Elemental Live database. You must now restore the database.

For detailed instructions, see [Restore a backup](#) in the AWS Elemental Live Configuration Guide.

Step F: Upgrade the license

The new version of the software might include a feature that is in an add-on package. Such a feature requires a license. Therefore, you must obtain a new license and install it.

If you didn't purchase any add-on packages, skip this step.

To obtain the license for an Elemental Live appliance

-   Contact your AWS Elemental sales person and provide the following information:

    -   The names of the add-on packages you want. For a list of add-on packages, see [Purchasing an add-on package](#) in Elemental Live User Guide.

    -   The hardware serial number or the MAC address of the node.

To obtain the license for qualified hardware or a VM

1. Contact your AWS Elemental sales person and provide the following information:

   - The names of the add-on packages you want. For a list of add-on packages, see Purchasing an add-on package in Elemental Live User Guide.

   - The key file that you generated when you initially installed the software. The file name has this syntax:

     ```
     activation_<hostname of the system>.key
     ```

     You can find this key in either of these places:
     - In the home directory of the hardware unit or VM

     - On your workstation. If you followed the recommendation that we gave in the installation procedure, this folder has a name such as `elemental_live_license_keys`.

2. AWS Elemental provides you with a new license. The license has the following syntax:

   ```
   lic-download-<hostname>.tgz
   ```

To install the license

You must unzip the license file, copy the unzipped file to the node that it applies to, and restart the elemental service. Following are detailed instructions.

1. AWS Elemental provides you with a new version of the license. You receive this license in one of these ways:

   - Via email

   - Via your Salesforce account

2. Download the license file to your workstation. Then follow the procedure that applies to your browser to open the folder that contains the downloaded license files. Make a note of the folder where the license files are located.

3. Use a method such as SCP to move the license file (the .tgz file) from your workstation to the location on the Elemental Live hardware unit where your licenses are stored. This folder might have a name like `elemental_licenses`.

   The new license will replace the current license because the two files have the same name.

Make sure that you put the correct license on each hardware unit. The license only works on a specific hardware unit.

4. Using an SSH client such as PuTTY, log in to the hardware unit with the elemental user credentials.

   You are logged in at the home directory (`/home/elemental`).

5. Navigate to the directory that contains the license file, and extract the `.lic` files from the `.tgz` file. Place the `.lic` files in these folders:

   `/home/elemental`

   `/opt/elemental_se`

   The new license will replace the current license because the two files have the same name.

6. Enter the following command to restart the Elemental Live service:

   ```
   [elemental@hostname ~]$ sudo service elemental_se restart
   ```

Downgrades in Elemental Live

This section describes how to downgrade the AWS Elemental Live software version.

Downgrade rules

The following rules apply when you're downgrading AWS Elemental Live software.

- Your system must be in a working state prior to the downgrade. If it's in a degraded state (for example, it is failing to successfully craete events, or it isn't responding through the web interface), the downgrade does not work.
- You can downgrade to a version that's a maximum of two major versions below your current version. For example, from 2.25.4 to 2.23.5 (The number of minor versions between the two versions is irrelevant.)
- However, we recommend that you always downgrade to the highest minor version in the series you're downgrading to. For example, downgrade to 2.23.5. Don't downgrade to 2.23.5.
- To downgrade over a bigger span than two major versions, you must perform the downgrade in several steps. For example, downgrade from 2.25.4 to 2.23.5 and then to 2.22.5.

> ⚠️ **Important**
>
> Plan to downgrade during a maintenance window. All activity on the nodes stops during downgrade.

> ⓘ **Note**
>
> In this procedure, we show how to downgrade Elemental Live from version 2.25.4 to version 2.23.5. Modify your commands to specify the version that you are downgrading to.

Topics

- [Step A: Get ready to downgrade](#)
- [Step B: Copy the AWS Elemental installer](#)
- [Step C: Downgrade the node](#)

Step A: Get ready to downgrade

The following steps prepare you for downgrading AWS Elemental Live. Perform these steps to ensure that you don't lose any data.

Save the database backup

Locate the database backup for the version that you're downgrading to. Copy the backup to a location off of the system. Performing a downgrade removes your entire file structure.

Every time that you downgrade, a backup of the database is automatically made and saved in the following location.

```
/home/elemental/database_backups/elemental-db-backup_live_n.n.n.n_yyyy-mm-dd_hh-mm-ss.tar
```

For example:

```
elemental-db-backup_live_2.23.5_2021-02-08_21-01-36.tar
```

When you perform a downgrade, you must specify a database to restore. You should restore the backup that corresponds to the version you are downgrading to. For example, when downgrading to 2.23.5, restore the 2.23.5 database.

Create a bootable kickstart

You must install the host operating system from an `.iso` file onto each physical machine that will be running Elemental Live. Doing so is referred to as "kickstarting the system".

Make sure that you install the right version of the operating system with each piece of software. The correct `.iso` file is available at [AWS Elemental Support Center Activations](#).

Create a Boot USB Drive

Do this from your workstation.

Use a third-party utility (such as PowerISO or ISO2USB) to create a bootable USB drive from your `.iso` file. For help, see [this knowledge base article](#).

Step B: Copy the AWS Elemental installer

Locate and copy the installer for Elemental Live.

1. Find the version of the AWS Elemental Live software that you're downgrading to:

   - From a Linux prompt, log in to the hardware until with the *elemental* user credentials.

   - Look for the desired installer as shown here.

   ```
   [elemental@hostname ~] ls
   ```

   For example, look for `...elemental_production_live_2.23.5.12345.run...`

2. If you find the software, skip to [the section called "Step C: Downgrade the node"](#).

   If the software isn't on the hardware unit, go to the next step.

3. From your regular workstation, open a web browser, go to [AWS Elemental Support Center Activations](#) and download the software for the version that you're downgrading to.

4. Make a note of where downloads are stored on your workstation. For example:

   ```
   h:/corporate/downloads/.
   ```

5. Make a note of the name of the download file. For example:
   `elemental_production_live_2.23.5.12345.run`

6. Copy the download file from your workstation to `/home/elemental/` on one of the nodes. For example:

   - Use SFTP protocol and an FTP client application on your workstation computer. Connect to the IP address for Elemental Live on port 22 with the *elemental* user credentials and transfer the file.

   - Use SCP protocol and an SCP client application on your workstation computer. Copy the file with the *elemental* user credentials and transfer the file.

7. Repeat the download to any other nodes that are changing versions. If you're changing versions on several nodes, copy the download file to every hardware unit at once. Doing so reduces downtime on each node as you start installing the new software.

Step C: Downgrade the node

When you downgrade AWS Elemental Live , run the installer with the `--downgrade` switch for each node.

To downgrade the node

1. From the Linux prompt, log in with the *elemental* user credentials. Once you are logged in, the initial directory is /home/elemental.

2. Enter the following command. For example:

   ```
   [elemental@hostname ~]$ chmod 755 elemental_production_live_2.23.5.12345.run
   ```

3. Run the installer with the skip-all option. Use the following commands with the actual file name of the `.run` file, rather than the example below:

   - For GPU and CPU versions of the software:

     ```
     [elemental@hostname ~]$ sudo sh ./elemental_production_live_2.23.5.12345.run -c
       --skip-all --start -xeula --downgrade
     ```

   - For CPU-only versions of the software:

     ```
     [elemental@hostname ~]$ sudo sh ./elemental_production_live_cpu_2.23.5.12345.run
       -c --skip-all --start -xeula --downgrade
     ```

   Switches are as follows:

   - `2.23.5.12345`: Is the software version that you're downgrading to.

   - `-xeula`: Skips the prompts to read through the EULA. You are prompted once to accept it.

   - `--start`: Specifies to start the services without being prompted.

   - `--downgrade`: Tells the installer that an earlier version is being installed.

   - `--restore-db-backup <path>`: Installs the old version of the database backup file. Provide the path and file name in the following format:

     ```
     /home/elemental/elemental-db-backup_<version>_<date>.tar
     ```

Following our example, enter:

```
/home/elemental/elemental-db-backup_2.23.5_2021-02-08_21-01-36.tar
```

4. Restart the node with the following command:

```
[elemental@hostname ~] sudo reboot
```

Repeat the downgrade steps on each worker node before moving on to the next step in the downgrade process.

Downloading AWS Elemental Live software

These are the detailed steps for downloading software files from the AWS Elemental Support Center.

1. Log in to the AWS Elemental Support Center with the email address that you used to receive your activation email and your password.

2. From the home page, click **Software and Licenses** on the right.

3. From the **Download Central Home**, choose **Your Entitlements** from the **Software & Entitlements** menu.

4. On **Your Entitlements**, your orders are listed from newest to oldest. In the **Activation Key** column, choose the link for the product that you're downloading.

5. On **Order Detail**, expand the order detailsusing the **+** sign.

6. In the expanded details, choose the product and version to download, then choose the file to download.

7. On **Product Download**, select the check box next to the file you want to download. Then click **Download Selected Files**.

8. If you are prompted to install the NetSession Interface download manager, click **download the installer** and run the executable.

9. Select a location and save the files. Note the file location for later.

Document History for AWS Elemental Live Upgrade Guide

The following table describes the documentation for this release of AWS Elemental Live.

- **API version:** 2.5 and later
- **Release notes:** current Release Notes
- **Latest documentation update:** August 19, 2019

Change	Description	Date
Remove password information.	Removed information about default passwords. If you need assistance with a password, see your system administrator.	August 19, 2019
Initial document release.	Release of documentation	December 19, 2018