



Upgrade Guide

# AWS Elemental Statmux



**Version 2.20**

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# AWS Elemental Statmux: Upgrade Guide

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This is version 2.20 of the AWS Elemental Statmux documentation. This is the latest version. For prior versions, see the *Previous Versions* section of [AWS Elemental Statmux and AWS Elemental Live Documentation](#).

# About this Guide

This guide is intended for engineers who upgrade the software running on the nodes of AWS Elemental Statmux.

The full suite of upgrade information for AWS Elemental Statmux is described in the table:

| Deployment   | Description  | Information   |
|--|--|---|
| Stand-alone deployments  | AWS Elemental Statmux nodes are not in a cluster controlled by AWS Elemental Conductor Live 3.   | This guide.   |
| AWS Elemental Conductor Live 3 simple cluster                                  | AWS Elemental Statmux nodes in a cluster controlled by one AWS Elemental Conductor Live 3 node without backup worker nodes.  | <a href="#">AWS Elemental Conductor Live 3 Upgrade Guide</a>      |
| AWS Elemental Conductor Live 3 high-availability cluster, no worker redundancy | AWS Elemental Statmux nodes in a cluster controlled by two AWS Elemental Conductor Live 3 nodes (a primary and a backup). No backup worker nodes.  | <a href="#">AWS Elemental Conductor Live 3 Upgrade Guide</a>      |
| AWS Elemental Conductor Live 3 with worker redundancy                          | One of the following: <ul style="list-style-type: none"><li>• AWS Elemental Statmux nodes with backup Statmux nodes, in a cluster controlled by one AWS Elemental Conductor Live 3 node.</li><li>• Statmux nodes with backup Statmux nodes, in a cluster controlled by two AWS</li></ul> | <a href="#">AWS Elemental Conductor Live 3 Installation Guide</a> |

| Deployment | Description   | Information |
|------------|---|-------------|
|            | Elemental Conductor Live<br>3 nodes (a primary and a backup). |             |

## Prerequisite Knowledge

We assume that you know how to:

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

### Note

To receive assistance with your AWS Elemental appliances and software products, see the forums and other helpful tools on the [AWS Elemental Support Center](#).

## Sending Commands

Tips for 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 AWS Elemental Statmux

This section describes how to upgrade to AWS Elemental Statmux version 2.20.x.

## Upgrade rules

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

- Your system must be in a working state prior to the upgrade. If it's in a degraded state (such as not accepting MPTSs 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, such as from 2.17.x to 2.20.x. The number of patches between the two versions is irrelevant. To upgrade over a bigger span, you must perform several upgrades, such as from 2.15.2 to 2.17.4, then to 2.20.0.

### Important

Plan to upgrade during a maintenance window. All activity on the nodes stops during upgrade.

## Summary steps

- [Step A: Get Ready](#)
- [Step B: Copy the AWS Elemental Statmux Installer](#)
- [Step D: Upgrade the Node](#)

## Step A: Get Ready

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

## Check Essential Notes

Refer to the essential notes in the [AWS Elemental Statmux Release Notes](#) to identify changes in behavior with the upgrade.

## Verify the Worker Type

The software installer that you use for the nodes varies depending on if 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 icons as follows:

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



## Save the Latest Backup

When you install the upgraded 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 from 2.20.

### 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 AWS Elemental Statmux saves its backups.

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

3. Locate the most recent backup and save it to a location off of the AWS Elemental system. The backup name includes the date and time that the backup was taken, in a format similar to this:  
`elemental-db-backup_live_2.14.8_2018-02-08_21-01-36.tar`

## Create Bootable Kickstart

You must install the host operating system from an `.iso` file onto each physical machine that will be running AWS Elemental software. 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 the knowledge base article [Creating Bootable Recovery \(kickstart\) Media](#).

## Step B: Copy the AWS Elemental Statmux 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\_statmux\_2.20.0.123456.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 AWS Elemental Delta 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 [Downloading AWS Elemental Statmux Software](#).

## Step D: Upgrade the Node

The upgrade steps that you take depend on the version that you're upgrading to. The following section describes upgrading to 2.20.x.

These steps must be performed on the AWS Elemental Statmux hardware unit.

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_statmux_2.20.n.nnnnn.run --skip-all --start
```

- For CPU-only versions of the software.

```
[elemental@hostname ~]$ sudo sh ./elemental_production_statmux_cpu_2.20.n.nnnnn.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 AWS Elemental Statmux web interface.

# Downloading AWS Elemental Statmux Software

These are the detailed steps for downloading 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**, choose the plus sign for the package listed in the **Product Description** column to expand the order details.
6. In the expanded details, choose the product and version that you wish to download.
7. In the list of available files, choose the file you wish to download.
8. On **Product Download**, select the check box next to the file you want to download. Then click **Download Selected Files**.
9. If you are prompted to install the NetSession Interface download manager, click **download the installer** and run the executable.
10. Select a location and save the files. Note the file location for later.

# Downgrades in AWS Elemental Statmux

This section describes how to downgrade from AWS Elemental Statmux version 2.20.x.

## Downgrade rules

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

- Your system must be in a working state prior to the downgrade. If it's in a degraded state (such as not creating MPTSs or not 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, such as from 2.20.x to 2.17.x. The number of patches between the two versions is irrelevant. We do recommend, however, that you always use the latest patch release of the major version that you're downgrading to, for example, 2.17.6. To downgrade over a larger span, you must perform several downgrades, such as from 2.20.3 to 2.17.4, then 2.15.3.

### Important

Plan to downgrade during a maintenance window. All activity on the nodes stops during downgrade.

## Topics

- [Step A: Get Ready](#)
- [Step B: Copy the AWS Elemental Installer](#)
- [Step C: Downgrade the Node](#)

## Step A: Get Ready

The following steps prepare you for downgrading. 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_statmux_n.n.n.n_yyyy-mm-dd_hh-mm-ss.tar
```

### Example

```
elemental-db-backup_statmux_2.17.8_2018-02-08_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 2.17.8, restore the 2.17.8 database.

## Create Bootable Kickstart

You must install the host operating system from an `.iso` file onto each physical machine that will be running AWS Elemental software. 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 the knowledge base article [Creating Bootable Recovery \(kickstart\) Media](#).

## Step B: Copy the AWS Elemental Installer

Locate and copy the installer for AWS Elemental Statmux.

1. Find the version of the software that you're downgrading to.

Follow these steps:

- a. From a Linux prompt, log in to the hardware unit with the *elemental* user credentials.
- b. Look for the desired installer as shown here.

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

Look for the file named similar to this

```
...elemental_production_statmux_2.17.0.123456.run...
```

2. If you find the software, skip to [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 going 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_statmux_2.17.0.123456.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 AWS Elemental Delta 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

The downgrade steps that you take depend on the version that you're downgrading to. The following section describes downgrading from 2.20.x to 2.17.x or 2.16.x .

When you downgrade to 2.17.x, 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:

```
[elemental@hostname ~]$ chmod 755 elemental_production_statmux_2.17.n.nnnnn.run
```

3. Run the prepare for downgrade script:

```
[elemental@hostname ~]$ sudo /opt/elemental_se/web/script/prepare_for_downgrade.sh  
-i ./elemental_production_statmux_2.17.n.nnnnn.run
```

4. 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:

```
[elemental@hostname ~]$ sudo sh ./elemental_production_statmux_2.17.n.nnnnn.run -c  
--skip-all --start -xeula --downgrade
```

Switches are as follows:

- `2.17.n.nnnnn`: 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 version old version of the database backup file. Provide the path and file name in the following format:

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

5. When the installer completes, **do not** reboot or restart! Run these two commands first:

```
[elemental@hostname ~]$ sudo yum versionlock delete device-mapper*
```

```
[elemental@hostname ~]$ sudo yum install lvm2
```

If you don't run these commands before rebooting, the node will boot into emergency mode and you might lose data.



6. Restart the node with the following command:

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

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

# Performing a Clean Install of AWS Elemental Statmux

## Step A: Get Ready

### Save Your Files

During the kickstart part of a clean install, all the files on the node are permanently deleted. Therefore, you must first copy important files to another location. These files appear in the list in the table below.

1. Locate the following files on the node, in the `/home/elemental` directory:

| File   | Description  |
|--|--|
| <code>elemental_production_statmux_n.n.n.nnnnn.run</code><br><br>where <code>n.n.n.nnnnn</code> is the version you want to downgrade to, for example <code>2.51.12345</code> | The installer for the version that you are downgrading to.   |
| <code>database_backups/elemental-db-backup_statmux_n.n.n.nnnnn_yyyy-mm-dd_hh-mm-ss.tar</code>  | The database backup that was automatically created when you upgraded from this version, in a compressed, aggregated format.              |
| <code>activation_xxxx- &lt;random characters&gt; .key</code>   | The activation key for your license, present only if you installed software yourself.  |
| <code>lic-download- &lt;hostname&gt; .tgz</code>   | Aggregated, compressed file with all your license files. You will either have this file, or a set of individual <code>.lic</code> files. |
| <code>eme.lic</code>   | A license for AWS Elemental Statmux.   |
| <code>ui.lic</code>  | A license for AWS Elemental Statmux.   |
| <code>cable.lic</code>   | The license for the Cable Labs option, if installed.   |

2. Copy these files to a directory on another system, using the protocol compatible with your equipment. For example:
  - Use Windows Share protocol: Connect to `\\<node IP>\elemental` on a PC.
  - Use Samba: Connect to `smb://<node IP>/elemental` on a Mac.

## Locate Files to be Downloaded

1. Find the version of the software that you're downgrading to.

Follow these steps:

- a. From a Linux prompt, log in to the hardware until with the *elemental* user credentials.
- b. Look for the desired installer as shown here.

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

Look for the file named similar to this

```
...elemental_production_statmux_2.17.0.123456.run...
```

2. If you find the software, skip to [Step B: Install \(Kickstart\) the Operating System Software](#).

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 going 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_statmux_dg_version_short;.0.123456.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 AWS Elemental Delta 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 B: Install (Kickstart) the Operating System Software

You must install a configured operating system from an `.iso` file onto each physical machine that will be running AWS Elemental software. 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 always provided with the `.run` file under **Activations** at [AWS Elemental Support Center Activations](#).

### Create a Boot USB Drive or DVD

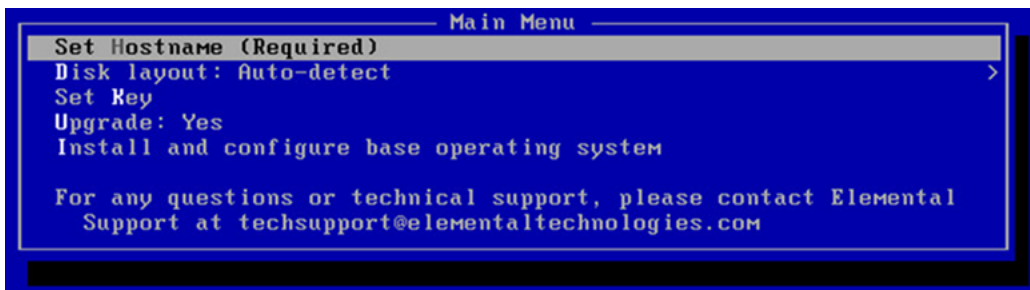
Do this from your workstation.

Use a third-party utility (such as PowerISO or ISO2USB) to create a bootable DVD or USB drive from your `.iso` file. Instructions for using these utilities can be found in the [AWS Elemental Support Center](#) knowledge base.

### Install the Operating System at Each Node

Do this from each Elemental node.

1. Insert the DVD or USB thumb drive into the hardware unit.
2. Boot up or reboot the system. The installer automatically starts.



3. Use the arrow keys to select each option and do the following:

| Menu Option                                 | Instructions   |
|---|--|
| Set Hostname                                | <p>Change the hostname to a useful name such as <b>statmux-01</b> or <b>statmux-chicago-01</b> .</p> <p>Do not use localhost as the hostname!</p> <p>Do not use periods or underscores in the hostname</p> |
| Disk layout: Auto-detect                    | Leave this set at Auto-detect.   |
| Set Key                                     | Press the down arrow to skip this option.  |
| Upgrade                                     | Choose <b>No</b> . Choosing <b>No</b> deletes all data from the hardware unit. Never choose <b>Yes</b> when doing a new install.   |
| Install and configure base operating system | Press <b>Enter</b> to begin the OS installation.   |

The operating system is installed. From now on, the system runs this customized version of your Linux operating system.

- Repeat the above steps on each system, using the .iso file that goes with the AWS Elemental software you are installing on each system.

## Step C: Restore Copied Files

Now that your operating system is reinstalled, restore the files that you copied back onto the AWS Elemental Statmux hardware unit, to /home/elemental.

Enter this command to extract the database.

```
[elemental@hostname ~]$ tar -xvf elemental-db-backup_statmux_2.20.1.12345_2018-03-18_17-34-38.tar
```

## Step D: Install the AWS Elemental Software

These steps must be performed on each system where you are installing AWS Elemental software, either directly at the machine or from your workstation via SSH. Make sure that you use the `.run` file that corresponds to the `.iso` file that you used to reinstall the operating system.

- At the Linux command line, log in with the *elemental* user credentials.

Run the installer as follows. Use the actual filename of your `.run` file, rather than the example below.

```
[elemental@hostname ~]$ sudo sh ./
elemental_production_statmux_dg_version_short; .nnnnn.run -l -z -t
```

where `-l` is a letter, not a number.

- You are prompted as described in the table below.

| Prompt                                    | Action   |
|---|--|
| Do you agree to these terms?              | <p>This prompt appears after you have paged through the EULA (End User License Agreement).</p> <p>Enter <b>Yes</b> or <b>No</b>. (You must enter Yes to continue.)</p> |
| Enter this server's Hostname              | Type the hostname of this hardware unit. For example, <b>statmux-01</b>  |
| Is eth0 a management interface?           | Type <b>Yes</b> .  |
| Does eth0 use DHCP to get its IP address? | Type <b>Yes</b> to use DHCP or type <b>No</b> to enter a static IP address.  |
| Enter eth0's IP address:                  | If you chose static, type the IP address for this hardware unit.   |

| Prompt  | Action  |
|---|---|
| Enter eth0's NETMASK:   | If you chose static, type the netmask for this hardware unit.                     |
| Enter eth0's Gateway (or type <b>none</b> ):                                      | If you chose static, type <b>none</b> or type the gateway for this hardware unit. |
| Keep this configured nameserver?  | Skip; you set up a nameserver in the next phase of configuration.                 |
| Would you like to configure eth1?   | Type <b>No</b> ; you can configure eth1 in the next phase of the configuration.   |
| The firewall for this system is currently disabled. Would you like to enable it?  | Skip; you set up the firewall in the next phase of configuration.                 |
| For security purposes, we require that you change the default password.           | This prompt is shown if you are still using the default password.                 |
| Is this machine a part of or intended to be a part of a Conductor Live 3 cluster? | Type <b>No</b> .  |
| Is this a Statmux machine, or intended to be linked to a Statmux machine?         | Type <b>Yes</b> .   |
| Will this machine require use of SNMP alerts?                                     | If applicable, type <b>Yes</b> to open the related port.                          |
| Will this machine be ingesting RTMP?  | If applicable, type <b>Yes</b> to open the related port.                          |
| Will this machine ingest MPEG-TS over UDP? (ports 5000-5100)                      | If applicable, type <b>Yes</b> to open the related port.                          |

| Prompt   | Action   |
|--|--|
| Is this machine licensed as part of a licensing pool?                  | If applicable, type <b>Yes</b> to open the related port.   |
| Will this machine serve files using Windows file-sharing (Samba/CIFS)? | If applicable, type <b>Yes</b> to open the related port.   |
| Will this machine be an NTP server?                                    | If applicable, type <b>Yes</b> to open the related port.   |
| Select time zone ('n' for more)  | Enter the time zone you want to show on the web interface of the nodes. This setting does not affect activity via SSH or via the REST API. |
| Would you like to start the Elemental service now?                     | Type <b>Yes</b> .  |

Then the software will be installed. Finally, this message will appear:

```
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!
```

3. Start a web browser and start the AWS Elemental Statmux web interface by typing the following:

```
http://<hostname>
```

Make sure the web interface displays.



## Step E: Install the License Files

At this point, the software is installed but it is not yet enabled. To begin using the software, install a valid license file on each node.

To do so, follow the steps described in the following table for detailed instructions.

| Step  | Where to Perform Step                                  | Start Step With                                | Finish Step With                      |
|---|--|--|---------------------------------------|
| Step a: Retrieve Activation Code                                | Your workstation                                       | Activation email                               | Activation code                       |
| Step b: Generate License Activation Key File                    | The AWS Elemental system, via an SSH client like PuTTY | Activation code                                | Key file ( .key )                     |
| Step c: Download Licenses from the AWS Elemental User Community | Your workstation                                       | Key file ( .key )                              | Tarball file ( .tgz )                 |
| Step d: Install the License Files                               | Your workstation                                       | Unlicensed software with limited functionality | Fully licensed, full-feature software |

### Step a: Retrieve Activation Code

You should have received an email containing an activation code. If you're installing software for more than one node, you will have received a separate code for each one.

If you didn't receive this email or have lost it, contact AWS Elemental Support through your company's Private Space in [AWS Elemental Support Center](#).

### Step b: Generate a License Activation Key File

The operating system that you installed on your hardware has a utility you can use to generate an activation key file.

## To generate an activation key file

1. 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 (/elemental).

2. Enter this command.

```
[elemental@hostname ~] ./keygen
```

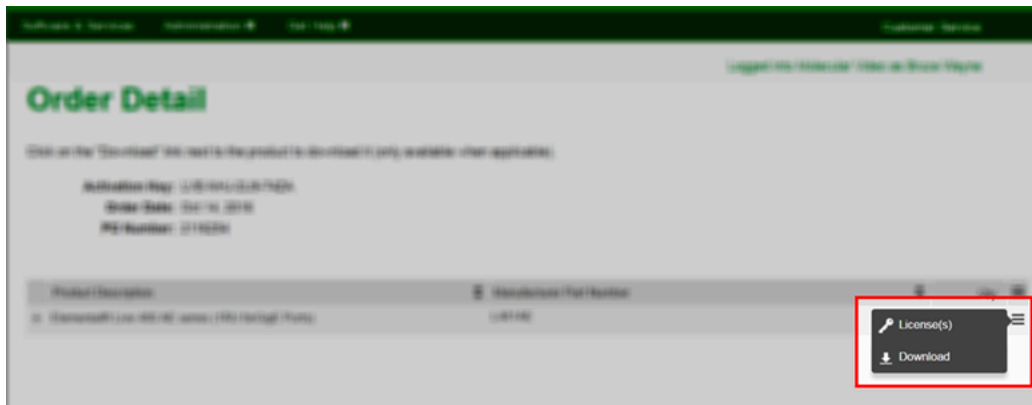
3. At the prompt, enter the activation code. The following file is created in the home directory: `activation_<hostname of the system>.key`.
4. Copy the file to your workstation. For example:
  - Use SCP or a similar utility on a Linux workstation.

Use the *elemental* user credentials and copy and paste the file from the network share.

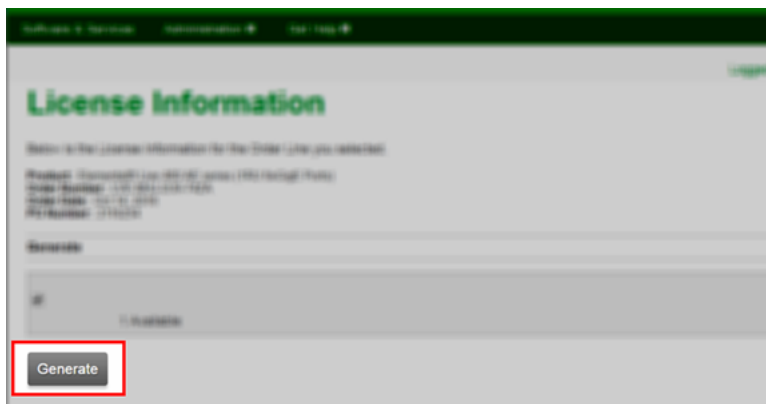
5. Repeat these steps for each AWS Elemental Statmux hardware unit.
  - Make sure to log in to each hardware unit for each activation key file that you want to generate: each activation key file that you create must contain the hostname of the individual hardware unit.
  - Make sure to use a different activation code on each unit.

## Step c: Download Licenses from the AWS Elemental User Community

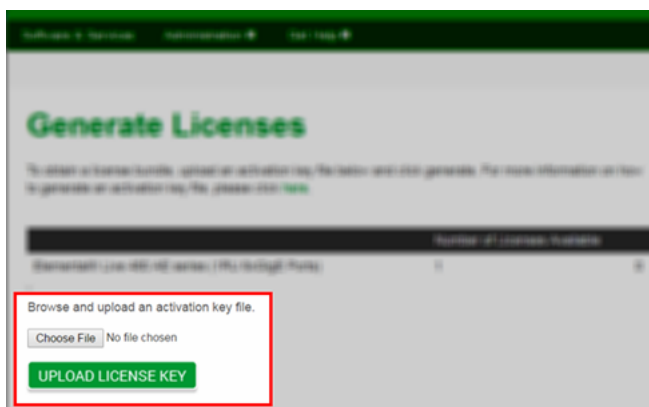
1. Follow the instructions in [Downloading AWS Elemental Statmux Software](#) to get to the **Order Detail** page on the [AWS Elemental Support Center Activations](#).
2. Hover over the three-bar icon on the right of the screen to bring up a small menu. Choose **License(s)**.



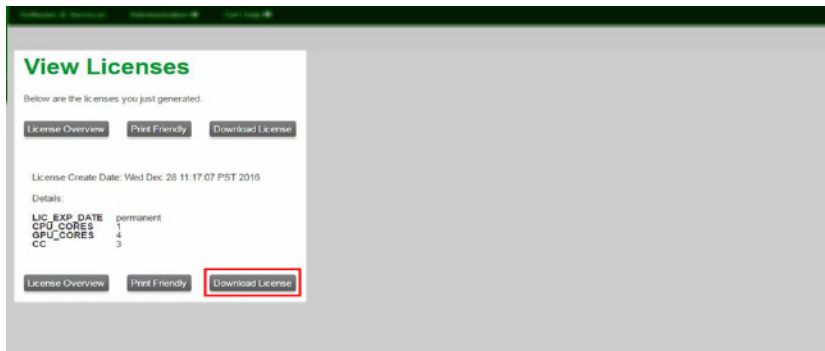
3. On the **License Information** page, choose **Generate**.



4. On the **Generate Licenses** page, select **Choose File** to browse to and select your .key file.
5. This returns you to the **Generate Licenses** page, with your .key file selected. Choose **Upload License Key**.



6. This takes you to the **View Licenses** page, where you can download a .tgz file. This is a compressed, aggregated file that contains all the license files that you need for this system.



7. Save the .tgz file to a place accessible to the AWS Elemental system that will be using this license, for example, a directory on your workstation called “licenses”. Make a note of the path.

The files are named `lic-download-<hostname>.tgz`.

8. Repeat these steps for each hardware unit that will have AWS Elemental software.

## Step d: Install the License Files

Now that you have a .tgz compressed license file for each instance of the software you are running, you must point the software to it.

From your workstation, perform the following steps for each newly installed AWS Elemental system.

1. Navigate to the directory where you saved the .tgz file and unpack it.
2. Bring up the web interface for the AWS Elemental Statmux system. From the main menu, select **Settings > Licenses**. The Licenses screen appears.
3. Select **Choose File** and navigate to the directory where you placed the license files. Select the file name with the hostname portion matching the hostname of this node.



4. Back on the Licenses screen, choose **Update**. The license file is installed.
5. Repeat steps 1 through 4 on each node.

## Step F: Configure the Node

Now that each system has the appropriate software installed, see the following guides to complete configuration:

| Scenario  | Guide  |
|---|--|
| AWS Elemental Statmux in a stand-alone configuration. Statmux is not managed by AWS Elemental Conductor Live 3. | <a href="#">AWS Elemental Statmux Configuration Guide</a>          |
| Multiple AWS Elemental Statmux nodes managed by AWS Elemental Conductor Live 3.                                 | <a href="#">AWS Elemental Conductor Live 3 Configuration Guide</a> |

# Document History for Upgrade Guide

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

- **API version:** 2.20
- **Release notes:** [AWS Elemental Statmux Release Notes](#)

The following table describes the documentation for this release of AWS Elemental Statmux. For notification about updates to this documentation, you can subscribe to an RSS feed.

| Change                               | Description                                   | Date              |
|--------------------------------------|---|-------------------|
| <a href="#">Version 2.20 release</a> | Changes to support the 2.20 software release. | December 23, 2020 |