

Getting Started with the LF Edge Sandbox

This document outlines the steps for creating an LF Edge Sandbox account, installing EVE on a hardware device, and selecting and deploying edge applications. It's designed to enable developers to deploy LF Edge projects for experimentation quickly. By the end of this Getting Started procedure, you will have a fully functional edge node, which will be onboarded to the LF Edge sandbox. You will also have deployed your first edge application to your new edge node. For any help along the way, please see the [LF Edge Sandbox support page](#).

If you want your project or application added to the LF Edge global marketplace, you can find more information [here](#).

Prerequisites

For a successful Sandbox experience, you will need the following:

- A Linux Foundation ID (LF ID) - You can learn about creating an LF ID [here](#)
- A free account on the LF Edge Sandbox SaaS platform - You can create an account [here](#)
- One or more edge nodes capable of running EVE-OS - Learn more [here](#)

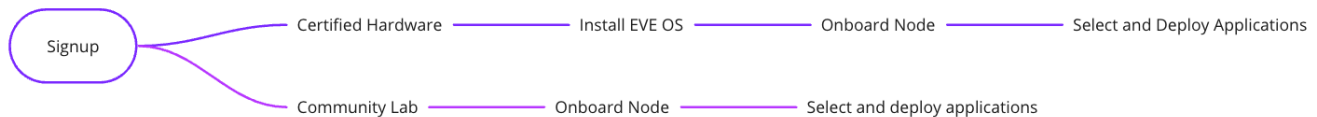
Creating an account

You can create a free LF Edge Sandbox account by visiting this [URL](#).

Getting Started

Read and complete the following sections sequentially. Note that some steps will link to documentation in the [ZEDEDA Help Center](#). These steps are more extensive than the others and merit dedicated documentation.

Once you have created an account, it's time to get started. In general, you can think of the workflow as follows:



Step 1: Select your edge hardware

Before you install EVE, you must verify that your device is supported. If you don't have a supported device, you can use the hardware resources offered by the LF Edge Community Lab. After you have installed EVE onto your device, it is considered an edge node. The rest of this procedure will refer to it as an edge node.

- Refer to the LF Edge Sandbox [hardware documentation](#) to verify your device is on the list of supported devices.
- COMING SOON - If your device is not supported, reserve hardware resources from the [LF Edge Community Lab](#).

Step 2: Install EVE-OS

To Install EVE-OS, you will need to build an EVE-OS Image, flash it to a portable drive, and then install it onto your edge node.

1: Build your EVE-OS image

Complete the following procedure that is appropriate for your operating system. When you finish, you will have an installer.raw file, which you will use to install EVE-OS.

MacOS and Linux

1. Open your terminal. Ensure you are in your preferred directory for this operation. This procedure assumes HOME.

```
cd $HOME
```

2. Make an eve-overrides directory containing your server endpoint configuration.

```
mkdir eve-overrides
```

3. Set the LF Edge Sandbox cluster endpoint by writing its URL to a text file named "server".

```
echo https://sandboxcloud.lfedge.org > $HOME/eve-overrides/server
```

4. Create your installer.raw file

For **x86 edge nodes**, run the following command.

```
docker run -v $HOME/eve-overrides:/in --rm lfedge/eve:latest \
installer_raw > installer.raw
```

For **ARM and RPi edge nodes**, run the following command.

```
docker run -v $HOME/eve-overrides:/in --rm lfedge/eve:latest-arm64 \
live > live.img
```

Windows OS

1. Open your terminal. Ensure you are in your preferred directory for this operation. This procedure assumes HOMEPATH.

```
cd %HOMEDRIVE%\%HOMEPATH
```

2. Make an eve-overrides directory, which will contain your server endpoint configuration.

```
mkdir eve-overrides
```

3. Set the LF Edge Sandbox cluster endpoint by writing its URL to a text file named "server".

```
echo https://sandboxcloud.lfedge.org > %HOMEDRIVE%\%HOMEPATH%\eve-overrides\server
```

4. Create your installer.raw file

For **x86 edge nodes**, run the following command.

```
docker run -v %HOMEDRIVE%\%HOMEPATH%\eve-overrides:/in \
--rm lfedge/eve:latest installer_raw > installer.raw
```

For **ARM and RPi edge nodes**, run the following command.

```
docker run -v %HOMEDRIVE%\%HOMEPATH%\eve-overrides:/in \
--rm lfedge/eve:latest-arm64 live > live.img
```

2: Flash an EVE-OS image

Flash the image you created to a blank bootable drive (USB, for example). You can find the [detailed instructions for flashing the image on the ZEDEDA help website](#).

3: Install EVE-OS on the edge node

Install EVE-OS on your edge node. You can find [detailed instructions for installing EVE on the ZEDEDA help website](#).

Step 3: Onboard Your Edge Node

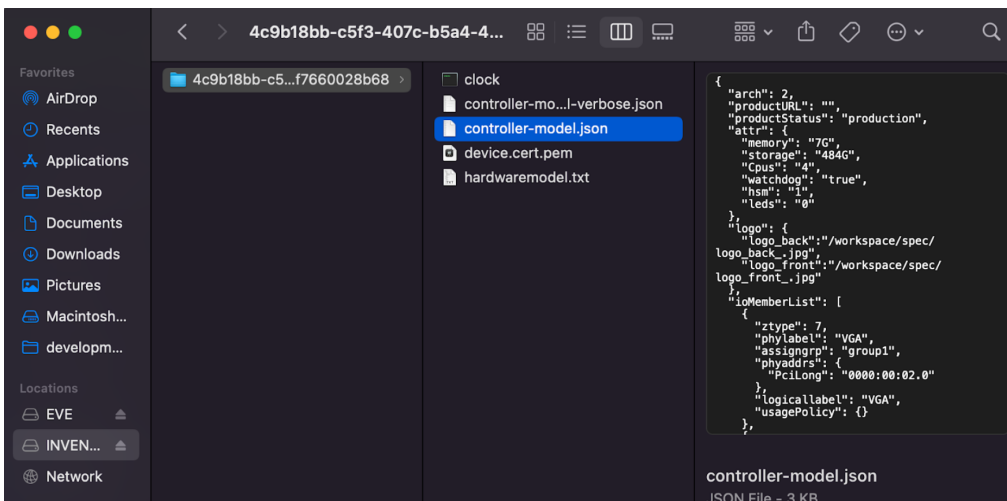
You will use the LF Edge Sandbox GUI to onboard your edge node. You will need the Onboarding Key and the edge device soft serial number.

1: Obtain the Onboarding Key

The onboarding key is available on an LF Edge wiki page. Please note you need an LF ID to access this page and copy the onboarding key. The onboarding key instructions are here <need to link to onboarding key doc>.

2: Get your soft serial number for your edge device

You will need to input your edge node's unique soft serial number (created automatically during EVE-OS installation). The soft serial number gets written to the USB stick during installation, or you can `cat soft_serial` from inside the EVE-OS /config directory. If you plug the USB stick into your laptop after installation, you'll find the serial number as the directory name in the INVENTORY partition. On macOS, it should look something like this:



3: Use the GUI to onboard your edge node.

Login to your [LF Edge Sandbox](#) and navigate to the Edge Nodes page. Click the "+" symbol in the upper right-hand corner to add a new Edge node.

Input the Onboarding Key from the LF Edge Wiki and then copy and paste the value of your device's soft serial number into the Serial Number field. Next, select your device's imported Brand and Model, configure any other required elements, and click the Add button to submit the page.

You can find more details about adding an edge node in [this help article](#).

Step 4: Select appropriate applications and projects from the Marketplace.

Select an LF Edge Sandbox Application: You can click on the Marketplace icon to see the LF Edge Projects as applications in the marketplace. See the [Import Edge Applications](#) article to follow the steps to import edge applications to your Sandbox tenant. Click [here](#) to learn more about Sandbox applications.

Add (Create) your own Edge Application: You can create a new application using a containerized or VM image that is ready to be deployed on EVE-OS. The [add an edge application documentation](#) will walk you through the steps to create a new edge application.

Step 5: Deploy your edge applications on your edge nodes

Once you have finalized which edge applications to deploy on your edge nodes, follow these steps to [deploy the desired edge application](#) on one or multiple Edge Nodes in your Sandbox.

Step 6: Monitor the status of your edge nodes and applications

Click the Edge node icon on the left navigation to see a list of individual Edge Nodes in a table view. Click on an Edge Node to see details like 'Status,' 'Basic information,' and 'Events' in separate tabs. See [Lifecycle Operations on Edge Nodes](#) to learn more.

Similarly, you can see deployed edge application instance details by clicking on the edge application name in the list view. See [Lifecycle Operations on Edge Applications](#) to learn more about managing edge applications. These details help you monitor the health parameters of assets in your edge infrastructure.

Need Help?

Please see our [support page](#) for helpful resources.

About the LF Edge Sandbox

The LF Edge Sandbox is a free SaaS service provided by ZEVEDA that interoperates with your edge hardware running project EVE. This service interacts with edge nodes running project EVE software. Once associated, you can deploy other LF Edge projects from the global marketplace combined with any application you upload to your private marketplace.

Controlling Organization

The LF Edge Sandbox controlling organization is [the LF Edge TAC](#).

Contact Information

For more information, please visit our [community slack channel \[#lf-edge-sandbox\]](#) or post to [our email distribution list](#).