

Installation of Revolution EDA on OpenSUSE Linux

In response to one user's query, the installation of **Revolution EDA** on OpenSuse Tumbleweed was explored. These are the steps to install **Revolution EDA** on that distribution.

We will be using *Podman* instead of usual *Docker*. To install Podman, we will follow the instructions at OpenSuse documentation site: <https://documentation.suse.com/sles/15-SP2/html/SLES-all/cha-podman-overview.html>

According to OpenSuse Documentation: *Podman is a daemonless container engine for developing, managing, and running containers on a Linux System, and it offers a drop-in alternative for Docker.*

1. The first step is installation of Podman on machine. You could use command line to install Podman:

```
1 | sudo zypper in podman
```

Alternatively, you could use YaST2 to install *Podman*. Make sure that *podman-cni-config*, and *podman-docker* packages are also installed.

2. To install *podman-compose*, we need to use a third-party repository. Start YaST Software repositories and add https://download.opensuse.org/repositories/home:/aboe76/openSUSE_Tumbleweed/ repository. This repo has *podman-compose* utility that should be installed.

Priority	Enabled	Autorefresh	Name	Service	URL
99 (Default)	✓	✓	Main Repository (NON-OSS)		http://download.opensuse.org/tumbleweed/repo/non-oss/
99 (Default)	✓	✓	Main Repository (OSS)		http://download.opensuse.org/tumbleweed/repo/oss/
99 (Default)	✓	✓	Main Update Repository		http://download.opensuse.org/update/tumbleweed/
99 (Default)	✓	✓	aboe76		https://download.opensuse.org/repositories/home:/aboe76/openSUSE_Tumbleweed/
99 (Default)	✓	✓	openSUSE-20211123-0		http://download.opensuse.org/tumbleweed/repo/oss/
99 (Default)	✓	✓	openSUSE-Tumbleweed-Debug		http://download.opensuse.org/debug/tumbleweed/repo/oss/
99 (Default)	✓	✓	openSUSE-Tumbleweed-Source		http://download.opensuse.org/source/tumbleweed/repo/oss/

The packages installed in this OpenSuse system are:

Package	Summary	Installed (Available)
<input checked="" type="checkbox"/> podman	Daemon-less container engine for managing containers, pods and images	3.4.2-1.1
<input checked="" type="checkbox"/> podman-cni-config	Basic CNI configuration for podman	3.4.2-1.1
<input checked="" type="checkbox"/> podman-compose	A script to run docker-compose using podman	0.1.5-4.11
<input checked="" type="checkbox"/> podman-docker	Emulate Docker CLI using podman	3.4.2-1.1
<input type="checkbox"/> cockpit-podman	Cockpit component for Podman containers	(33-1.2)

3. Once all the necessary software is installed, we need to make sure that Podman can run without needing root privilege:

Run the following command:

```
sudo usermod --add-subuids 200000-201000 --add-subgids
200000-201000 $USER
```

Preferably reboot your machine so that the changes are propagated.

4. Now clone *Revolution EDA* Github repository at an appropriate location in the file system:

```
git clone https://github.com/eskiyerli/revEDAsSetup.git
```

5. Change to `revEDAsSetup` directory and edit `docker-compose.yml` file so that it looks like this:

```
1  version: "3"
2  services:
3    reveda:
4      image: reveda/public:latest
5      environment:
6        # this line should be uncommented for a linux host
7        - DISPLAY=${DISPLAY}
8
9      volumes:
10     # next two lines should be uncommented when running on a linux
machine.
11     - /tmp/.X11-unix:/tmp/.X11-unix
12     - /etc/machine-id:/etc/machine-id
13     - ./config:/home/caduser/config
14     - ./simulations:/home/caduser/simulations
15   network_mode: host
```

6. As a final setup step, edit `/etc/containersregistries.conf` file and remove `registry.suse.com` or at least place after `docker.io` in the configuration:

```
1  [registries.search]
2  registries = ["docker.io"]
```

7. Because `simulations/` directory on the host is mounted on the container, it can not be written by the container by default permissions. To be able to write this directory, you need to make it universally writable (assuming that you have already changed to `revEDAsetup` directory on the host:

```
1 | chmod -R a+rwX simulations/
```

8. Change to `revEDAsetup` directory if not already there in a terminal and run the following commands:

```
1 | xhost +
2 | podman-compose up --abort-on-container-exit
```

9. You should now see *Revolution EDA* main window. Once done with it, close the window and issue the following command to make sure that container is closed:

```
1 | podman-compose down
```

10. Note that *Revolution EDA* has its own `terminal` and `text editor` menu entries under the `utilities` menu.