

Singularity is a container system that can be used in HPC environment

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- Downloads: <https://github.com/gmkurtzer/singularity>
- Web: <http://singularity.lbl.gov/#home>
- Video by the author : (Good one ☺ )  
<https://www.youtube.com/watch?v=xulQoth0r4E>

There are 3 steps associated with building a container

1. Create an empty container
2. Bootstrap the container with an operating system
3. Execute the container

#### Creating an empty container

Following command will create an empty container with 4GB of space with name “Ubuntu.img”

```
singularity create -s 4096MiB ./Ubuntu.img
```

#### Bootstrapping a container

```
Singularity bootstrap ./Ubuntu.img ./debian.def
```

Where, Ubuntu.img is the empty image that we created in previous step and debian.def is the definition file which outline what steps to follow during the bootstrapping process.

#### Executing the container

```
Singularity shell ./Ubuntu.img
```

This will log you in to Ubuntu image that just created.

Please make sure that you create a new directory /apps in your new image. This is the entry point to Orion /apps space.