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=xuIQoth0r4E>

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.