

???

???

[illegible][illegible][illegible]

# Apptainer

2021 11 Singularity Linux Apptainer Apptainer

Docker  HPC  Apptainer  Singularity Image File (SIF)  Singularity

 Singularity  Singularity 

??





☐ Singularity Image File (SIF) ☐

????

☐ /fs00/software/singularity-images/ ☐ SIF ☐

????

☐ Docker Hub ☐ SIF ☐

-  Docker Hub  `apptainer build ubuntu.sif`  
`docker://docker.nju.edu.cn/library/ubuntu`
-  NVIDIA NGC  `apptainer build ngc_cuda.sif`  
`docker://ngc.nju.edu.cn/nvidia/cuda`

- `docker save` `xxxxxxxxxx`

```
apptainer build abc.sif docker-archive://abc.tar
```

????

1. `xxxxxx` `apptainer build --fix-perms --sandbox build`

```
docker://docker.nju.edu.cn/library/ubuntu
```

2. `xxxxxx` `apptainer shell build/`

3. `xxxxxxxxxxxx` `apt` `make`

4. `xxxx` `exit`

5. `xxxxxx` `SIFxxxxxx` `apptainer build abc.sif build`

`xxxxxx` `rootxxxxxxxxxxxxxxxxxxxxxx`

CI????

`git.nju.edu.cn` `CI/CD` `kaniko` `Docker` `xxxx` `xxxx` `xxxx` `xxxx` `apptainer`  

```
build ocr.sif docker://reg.nju.edu.cn/yaoge123/ocr
```

`xxxxxxxxxx` `CI/CDxxxxxx` `Dockerxx`

????

`xxxxxxxxxx`

```
#BSUB -q 62v100ib
#BSUB -gpu num=4

apptainer exec --nv cuda.sif app
```

????

- `--nv` `xxxx` `NVIDIA GPUs & CUDAxx`
- `--bind/-B src[:dest[:opts]]` `xxxxxxxxxx`

????

- [Apptainer](#)
  - [Apptainer User Guide](#)
  - [Docker Hub](#)
  - [NVIDIA NGC](#)
- 

Revision #33

Created 9 May 2021 23:05:29 by Yao Ge

Updated 16 December 2024 19:42:44 by Yao Ge