unpacked.infn.it: CernVM-FS as a Container Hub for

- The CernVM File System (CernVM-FS) is a scalable, reliable and low- maintenance software distribution service
- <u>Harbor</u> is an an open source trusted cloud native registry project that stores, signs, and scans content (for container images acts as Docker Hub)
- INFN Cloud deployed both services in (pre)production for their users
- CernVM-FS can be used to distribute container images (see <u>unpacked.cern.ch</u>), minutes after these have been pushed to the Harbor registry
- Images are readily available to run with <u>apptainer</u> (formerly singularity), including base operating systems, experiment software stacks, explorative tools (ML etc.) and user analyses
- No need to wait minutes for pulling and decompressing the complete image before run
- <u>User experience</u>:

docker push harbor.cloud.infn.it/testbed-dm/my-image:1.0
apptainer exec '/cvmfs/unpacked.infn.it/harbor.cloud.infn.it/testbed-dm/my-image:1.0' /bin/bash

- An experimental solution is also in place for running containers in Kubernetes
- Send me a email (verlato@infn.it) if interested in testing/using unpacked.infn.it

