

European Science Cluster of Astronomy & Particle physics ESFRI research Infrastructures

ESCAPE LAPP - WP3 OSSR

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ESCAPE Update on containerisation in the OSSR

Recent discussions in WP3 led to support only singularity or docker images in the OSSR (vs containers)

advantages:

- saving them in Zenodo without the need of a registry deal with them as other software in the OSSR
- assured reproducibility
- drawback:
 - 🖲 heavier
- We don't want to discourage people from using containers if they already do, but we don't recommend and support building them in the OSSR
- Still need to discuss how to link them to the source code and to define the metadata so they can be retrieved and used by other services (in particular the analysis platform)







Prospective work I'd like to start in CTA: how CTA can support deep learning analysis workflows in production in the future? What(computing) resources would be needed? (in particular GPUs)

• Technical studies:

- computing needs with current network to analyse all CTA data
- possibilities to reduce those needs: physics performances vs speed
- possibilities to run on different hardware
- needs to run in real-time?
- workflow: can DIRAC start GPU jobs? How to implement it?
- training versus inference: access to different data and different computing needs
- Political questions:
 - study to be done in the ESCAPE framework?
 - status of data access in ESCAPE?
 - Orobix is showing great interest in some of these studies, in particular reducing the network size/computing needs, running it on different hardware (CPU, edge...)
 - Where to start and who to contact (in CTA first, in ESCAPE)
- Internship to be confirmed soon, partly of completely on this subject





- Contact points?
- Collect needs
- Match needs with already existing solutions in ESCAPE
- See if other needs can be fulfilled in the ESCAPE framework and timeline
- Start onboarding process so TSPs have access to as many resources and services as possible from the beginning





Dates: June 7-18, 2021 (some conflicts in the last week of June)

recontacted tutors, collecting answers to update the scientific program and/or contact other tutors

