Cheatography

Sarus Cheat Sheet

by talita via cheatography.com/95996/cs/20780/

Basic Commands

help	List **commands** and *options*
version	Print sarus semantic version
--debug	Make commands output debug logs
--verbose	Make commands output info logs

ℹ Sarus is driven by its *sarus.json* configuration file, typically located at */opt/sarus/<version-number>/etc/sarus.json*.

Images

images	`sarus images`	List local images
pull	`sarus pull python:alpine`	Pull image from DockerHub
load	`sarus load ./debian.tar my_debian`	Loads tarball as image
rmi	`sarus rmi centos:7`	Deletes image

Runtime

run	`sarus run alpine cat /etc/os-release`
--tty	Allocate a pseudo-TTY in the container
--entrypoint echo hi	Overwrite the default ENTRYPOINT of the image
--mount=type=bind, src=HD,dst=CD	Mount custom host directories HD into the container at CD
--mpi	Enable MPI support
--ssh	Enable SSH in the container
--centralized-repository	Use centralized repository instead of the local one

⚠ You need to **pull** the image before you can **run** the container.

Useful Links

documentation	https://sarus.readthedocs.io
</> code	https://github.com/eth-cscs/sarus/
download	https://github.com/eth-cscs/sarus/releases

Other

ssh-keygen	Generate SSH keys locally to be used later with `sarus run --ssh ...`

ℹ More info about SSH hook here.

Examples on Localhost

GPU nbody	`sarus run ethcscs/cudasamples:9.2 /usr/local/cuda/samples/bin/x86_64/linux/release/nbody -benchmark -fp64 -numbodies=2000`
OSU Micro	`sarus run --mpi ethcscs/mvapich:ub1804_cuda92_mpi22_osu /usr/local/libexec/osu-micro-benchmarks/mpi/pt2pt/osu_latency`

⚠ These require GPU and MPI libraries respectively installed on the host, and *sarus.json* correctly configured.

Examples on HPC

GPU nbody	`srun -C gpu -N1 -t1 sarus run ethcscs/cudasamples:9.2 /usr/local/cuda/samples/bin/x86_64/linux/release/nbody -benchmark -fp64 -numbodies=200000`
MC all2all	`srun -C gpu -N2 -t2 sarus run --mpi ethcscs/osu-mb:5.3.2-mpich3.1.4 ./osu_latency`

ℹ Find more examples in the Sarus Cookbook.