

## CSCS update

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## Update (I): More user workflows

Containers are building blocks for software applications, tools, and platforms.

Use cases examples:

- User-defined software stacks (e.g. Large Hadron Collider)
- JupyterHub (e.g. Cray Urika-XC)
- Web-enabled Interactive supercomputing (e.g. Human Brain project)

## Updates to Shifter (II): Activities at CSCS

- Improved configurability for container deployment
  - Docker-like CLI update
  - Image management to support per-user quota
  - Write access for container (non-persistence)
- System-specific support (maintain software)
  - Nvidia GPU support
  - Cray MPI
  - SLURM

# Outlook

## Suggested improvement areas

- Simplified collaboration between developers, sites, and vendors
  - API for runtime (customization and extensibility)
  - Interoperability of solution
- Sustainable development (increase community participation)
- Share effort on maintenance, configuration, and support

## Standards can help

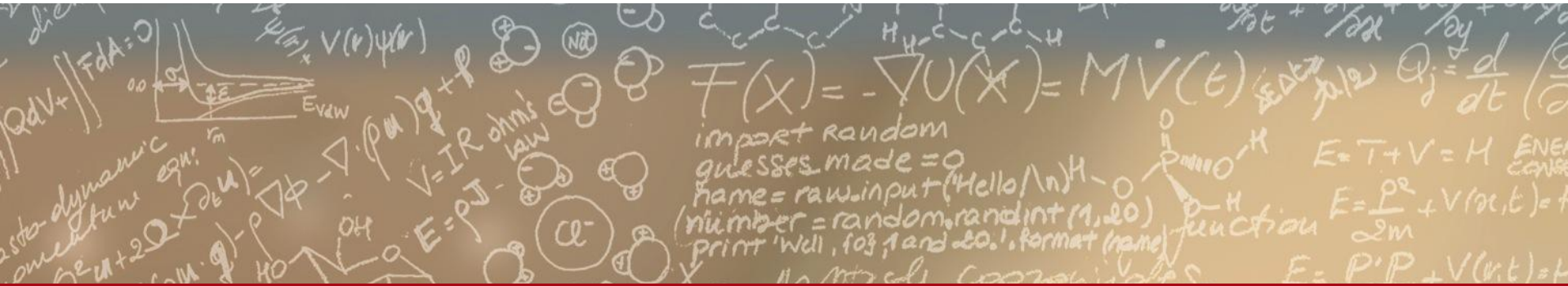
- For users: Docker CLI and image format
- For sites, developers, and vendors: OCI Runtime



**CSCS**

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**Thank you for your attention**