

# Getting Started on Alps Platforms

Webinar for the CSCS User Community, Feb 13 2025

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# Outline of the Webinar

- Introduction of Platforms
- Policies and Service Catalogue
- Documentation and Troubleshooting
- Community Slack Space and Status Page



Alps infrastructure in the CSCS machine room

Source: <https://www.cscs.ch/computers/alps>



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# Introduction of Platforms

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# Glossary

**Platform** A subset of Alps on top of the infrastructure that enables the deployment of one or multiple vClusters

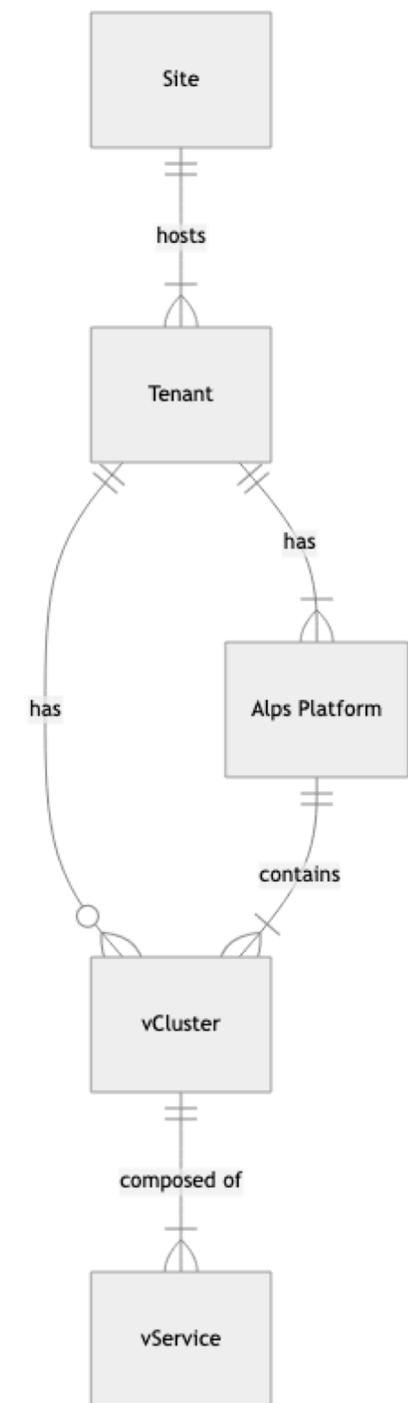
**Site** A physical place with the facilities to operate the infrastructure (CSCS in Lugano, EPFL in Lausanne, PSI in Villingen, ECMWF in Bologna)

**Tenant** Organization holding the underlying platform (CSCS, MCH, PSI,...)

**vCluster (versatile cluster)** Fusion of HPC and cloud technologies providing software-defined clusters on a supercomputing ecosystem

**vService (versatile cluster microservice)**

Small, independent, and loosely-coupled service hosted on a vCluster



# HPC Platform

The HPC Platform targets general purpose HPC computing on Alps

## Resources

- **GPU** nodes on **Daint.Alps** (quad-socket Grace-Hopper superchip nodes)
- **Multicore** nodes on **Eiger** (dual-socket AMD CPU-only nodes)

## Audience includes

- **User Lab** (Peer reviewed allocation programs)
- **Partners** (EMPA, ETH Zurich, Marvel, USI, UZH ...)
- [cscs2go](#) (targeting primarily Swiss researchers from Academia and SMEs)

# User and Allocation Management

Account and Resources Management Tool at <https://account.cscs.ch>

## Users

- Access your profile, list your projects (active and closed ones)
- Monitor your project's compute budget (quarterly allocation and usage)
- Check the usage of storage resources on home and scratch

## Principal Investigators (PIs)

- Invite users, manage project membership and access control
- Allow or deny users access to systems and project's data
- Define deputies and delegate project's administration

More information on the tool at <https://confluence.cscs.ch/x/VQBYLw>

# Submission and Monitoring of Batch Jobs

CSCS systems use the [Slurm workload manager](#) for user jobs management

Most frequently used Slurm commands

- **sbatch script.sh** – submit a Slurm batch script
- **squeue -u \$USER** – check the status of your jobs
- **scancel <jobID>** – remove your <jobID> from the queue

The command **sinfo** provides information on nodes and partitions

- **sinfo -sp normal** partition summary with **TIMELIMIT** and **NODES(A/I/O/T)**  
normal\* up 1-00:00:00 751/13/60/824
- Please note that nodes might be reserved: **scontrol show reservation**

More information on [Daint](#) and [Eiger](#) in the [CSCS Knowledge Base](#)

# Machine Learning Platform (MLP)

## The Machine Learning Platform targets AI/ML computing on Alps

### Resources

- **GPU** nodes on **Clariden** (quad-socket Grace-Hopper superchip nodes)
- Additional vClusters with NVIDIA A100 GPUs

### Audience is primarily the **Swiss AI** Initiative

- Build capacities for advanced, large-scale AI systems for the benefit of society
- Over 70 professors from Swiss universities and research centres
- Co-led by ETH Zurich and EPFL



# MLP

- Docs:
  - <https://docs.cscs.ch/>
- Clariden
  - Main cluster
  - ~1300 GH nodes
- Bristen
  - ~30 AMD+A100
  - Dev and inference
  - Public IPs

- > Access and Accounting
- > User Guides
  - > Alps (Clariden) User Guide
    - **Getting started on Clariden**
    - Storage in Clariden
    - Debug in your containers with ...
    - How To Use Container images...
  - > Alps (Eiger) User Guide
    - Daint
  - > Running jobs
  - > Programming Environment
  - > Storage
  - > Tools
  - > Tutorials
  - > Frequently Asked Questions (FAQ)
    - How-to articles
  - > Troubleshooting articles
  - > Scientific Applications
  - > Hidden content (CSCS Staff only)

## Getting started on Clariden

Clariden is a vcluster (versatile software-defined cluster) that's part of the Alps system.

A short summary of the hardware available in the nodes:

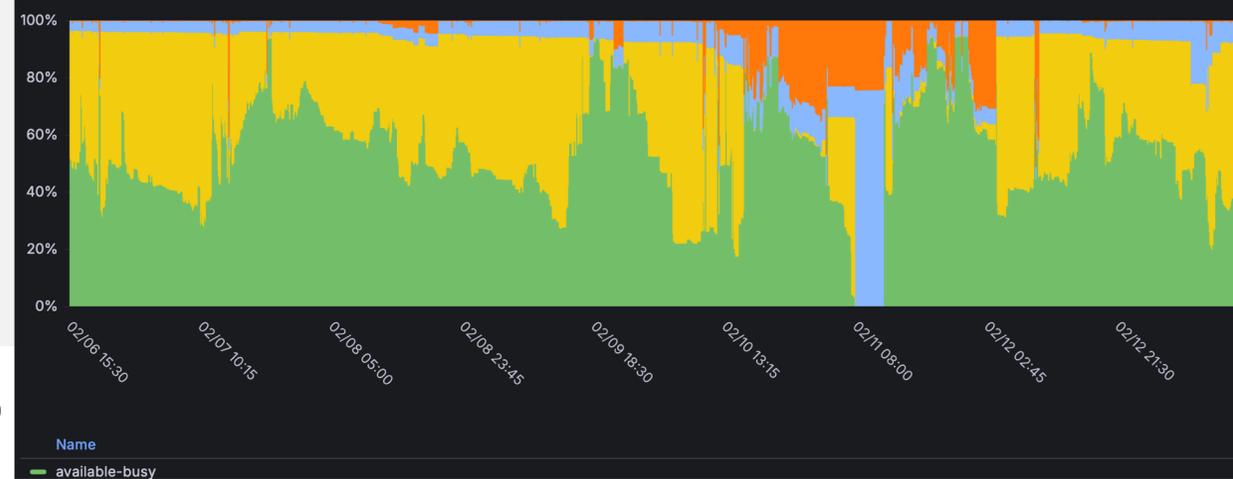
Partition	NNodes	GPUs per node	GPU	GPU memory	Max time
normal	1298	4	GH200	96GB	24 hours
debug	32	4	GH200	96GB	30 minutes

Each node consists of 4xGH200 superchips. Each superchip is a unified memory system consisting of a Grace CPU and a Hopper GPU with a 900GB/s NVLINKC2C connect. The Grace CPUs share 512GB of LPDDR5X memory. Each individual Hopper GPU has 96GB of HBM3 memory with 3000GB/s read/write, totaling 896GB of unified memory available within each node.

More information on the available partitions can be found with `scontrol show partitions.`

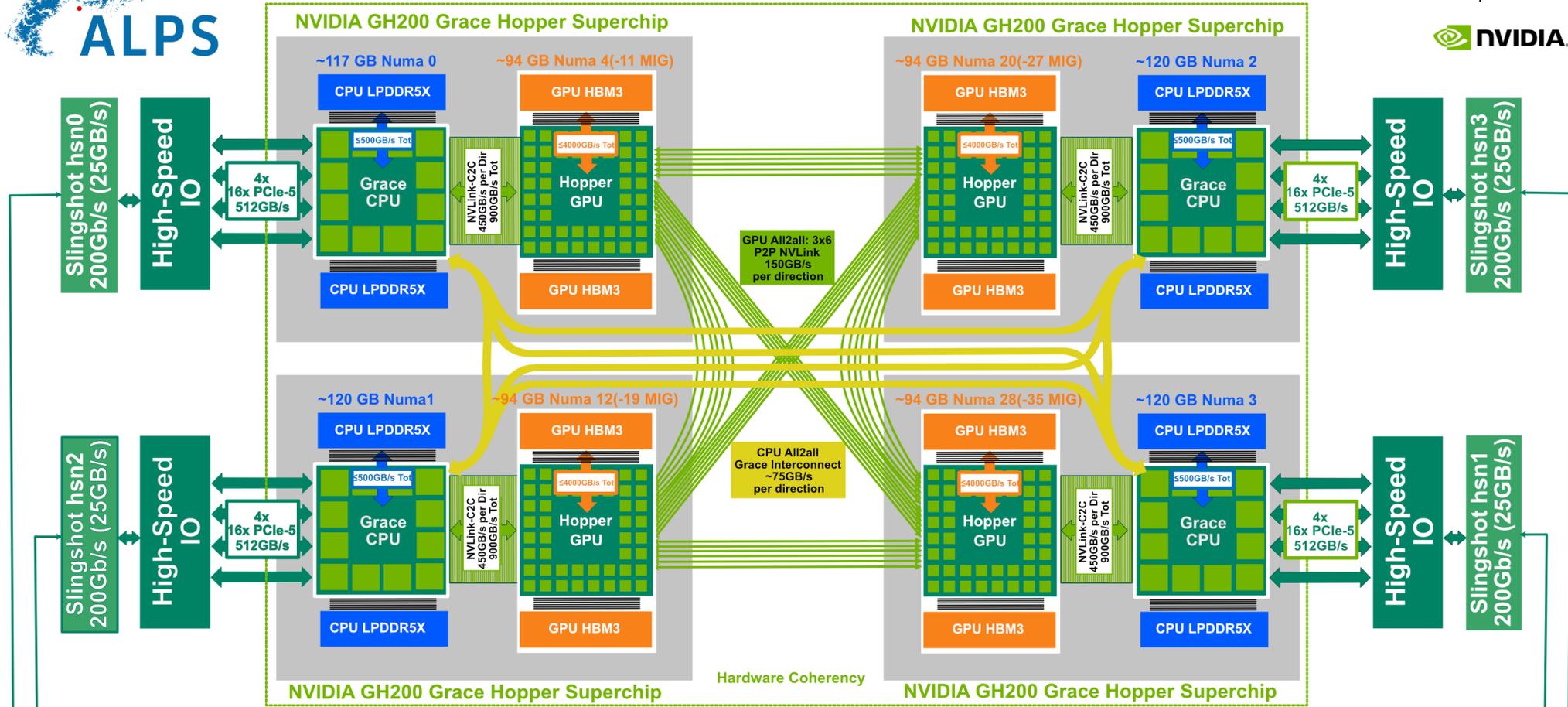
## Maintenance

- We aim to keep planned disruptive updates (meaning the services may potentially be inaccessible) to Tuesday morning (0800 -





CSCS ALPS HPE Cray EX GH200 Node  
 4xGH200 NVIDIA Grace Hopper Superchips ~477 GB (CPU) + ~378 GB (GPU) = ~855 GB Unified memory



Slingshot Switches connecting to other ALPS nodes, internet, storage (SSD/HDD)



# Containers



Knowledge Base ★ ☰



- > Access and Accounting
- > User Guides
- ▼ Programming Environment
  - ▼ Containers
    - Building container images on ...
    - Container Engine
    - Containerized use case exam...
    - Buildah
    - Sarus
    - Singularity
    - uenv user environments
- > Storage
- > Tools
- > Tutorials
- > Frequently Asked Questions (FAQ)
  - How-to articles
- > Troubleshooting articles
- > Scientific Applications
- > Hidden content (CSCS Staff only)

## Containers

CSCS provides state-of-the-art tools for running container workloads on HPC systems, addressing the unique needs of high-performance environments.

The tools currently available on Piz Daint are the following:

- [Building container images on Alps](#)
- [Container Engine](#)
- [Containerized use case examples](#)
- [Buildah](#)
- [Sarus](#)
- [Singularity](#)



kb-vcue

# User and budget management: <https://portal.cscs.ch/>

The screenshot shows the CSCS user management portal. On the left is a navigation sidebar with the CSCS logo and menu items: '+ Add resource', 'Organizations', 'Projects', 'Resources', 'Reporting', and 'Marketplace'. The main content area features a search bar, a user profile for 'Fawzi Roberto Mohamed' (ACTIVE), and a 'User dashboard' with tabs for 'Credentials', 'Notifications', 'Permission requests', and 'Audit logs'. Below this is a 'Roles and permissions' table.

Scope type	Scope name	Organization	Role name	Valid till
Project	csstaff	Swiss National Supercomputing Centre	Project member ⓘ	—
Organization	SwissAI Initiative	SwissAI Initiative	Organization owner ⓘ	—

[+ Add resource](#)[Organizations](#)[Projects](#)[Resources](#)

Project

a01 ×

[All resources](#)

3

[HPC](#)

3

[Storage](#)[Reporting](#)[Marketplace](#)[Support](#)

H

swissai-a01-bristen-alps OKOffering name: Bristen on Alps [\[Show offering\]](#)

Termination date: 2025-03-31 (in 1 month)

26 node-hours node-Ho...

[Refresh](#)[Actions ▾](#)[Getting started](#)[Usage](#)[Resource metadata ▾](#)

Team:

FC

LF

+12

## Getting started

### 1.a Access resources using SSH

Note: SSH requires a terminal via PuTTY, WSL, or Linux

```
$ | ela$ ssh -A bristen
```

### 2. Review the details regarding cluster partitions

```
$ | scontrol show partitions
```

### 3. Submit a job using SLURM commands

As a single run:

```
$ | srun -A a-a01 hostname
```

Schedule script for execution:

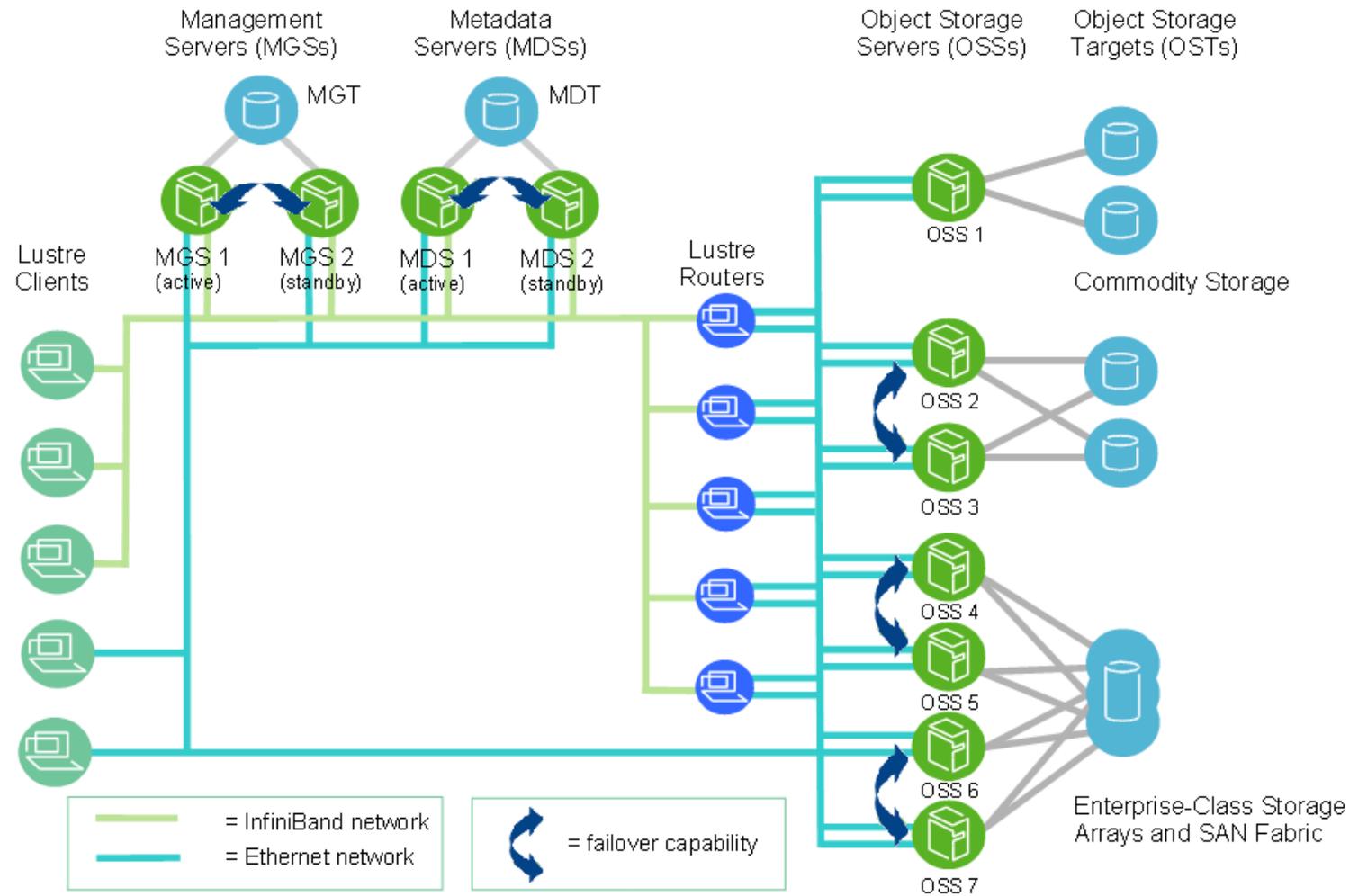
```
$ | sbatch -A a-a01 my_script.sh
```

# Invite new members

The screenshot shows the CSCS interface for managing resources. The breadcrumb path is "Organizations / Swis...tive / Projects / a06". The user is logged in as "Fawzi Roberto" from "FR". The main content area shows the "a06" project, a "SwissAI Initiative" with an end date of "2025-03-31". The "Team" dropdown menu is open, showing options for "Users", "Invitations", and "Permissions log". The "Invitations" option is highlighted with a green background and a red dashed circle. The "Add" button is also highlighted with a red dashed circle. The "Team invitations" section is visible, with columns for "Email", "Created at", "Expires at", and "Actions".

# Lustre

- `ifs osts`
  - `capstor: 160`
  - `iopsstor: 20`
- large file:
  - `ifs getstripe -d dir/path`
- `capstor`
  - `ifs setstripe --stripe-cou`
- `iopsstor`
  - `ifs setstripe --stripe-count 10 --stripe-size 4194304 directory/file`



# Climate and Weather Platform (CWP)

**The Climate and Weather Platform targets climate science computing on Alps**

## Resources

- **GPU** nodes on **Säntis** (quad-socket Grace-Hopper superchip nodes)

## Audience includes

- **EXCLAIM**  
Project for ICON-based km-scale climate simulations (ETH Zurich)
- **C2SM** Center for Climate Systems Modelling  
Eawag, EMPA, ETH Zurich, MeteoSwiss, WSL
- User Lab projects in climate and weather domains

# Säntis vCluster of the CWP

DNS: `santis.alps.cscs.ch` (currently also `santis.cscs.ch` – **will be deactivated by end of 25Q1**)

Slurm cluster providing 3 partitions

SLURM partition	Default wall time	Max. wall time	limitations
normal	01:00:00	24:00:00	-
debug	00:30:00	00:30:00	Single node
xfer	06:00:00	24:00:00	Single node

Major services currently available

- User Environments (UENVs)
- Container Engine
- CI/CD via Gitlab runners
- FirecREST (RESTful API to access the system programmatically)

Services currently in development

- JupyterHub



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# Policies

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# General Policies

The [code of conduct](#) outlines some responsibilities of the user community

- **Access to Source Codes:** you agree to make codes available for support
- **Scientific Advisory Committee:** committee members must not be contacted
- **Acknowledgements:** you must acknowledge the use of CSCS resources in all publications related to your allocation with reference to the “*project ID ###*”

[User Regulations](#) define guidelines for the usage of CSCS resources

- **Accounts are personal** and sharing them is forbidden
- **Data ownership:** access to and use of data of other accounts without prior consent from the principal investigator is strictly prohibited
- [ETH Zurich Acceptable Use Policy for Information and Communications Technology](#)

**Access to CSCS resources may be revoked to users violating these policies**

# Data Retention Policies

## Data backup for **active projects**:

- Data in **/users** and **/capstor/store** folders is [backed up](#) (past 90 days)
- Data in **/capstor/store** folders removed **3 months** after the **end of the project**

## As soon as a project **expires**:

- Data backup is **disabled** immediately
- **No data recovery** after the final data removal

## **No backup** for data on **scratch file system(s)**:

- No recovery in case of **accidental data loss**
- No recovery of data deleted due to the [cleaning policy](#)

More information on [Data Recovery](#) at <https://confluence.cscs.ch/x/kYBOLw>

# Policies of the scratch file system

**The capacity storage (capstor) features 100 PB in a Lustre file system**

**Cleaning policy: files older than 30 days deleted daily**

**No backup: you should transfer data after batch job completion**

Soft quotas to prevent performance degradation

- Quota on **total number of files and folders** (inodes)
- Quota on **amount of data** with a **grace time** to allow data transfer

More information on [scratch](https://confluence.cscs.ch/display/KB/scratch) at <https://confluence.cscs.ch/display/KB/scratch>

# Fair Usage Policies

## Slurm workload manager

- The batch scheduler is a shared resource
- **Do not continuously poll the scheduler** to determine job states
- **Do not submit hundreds of jobs** in a short space of time
- We may be forced to kill jobs and limit new submissions

## Login (User Access) nodes

- **Compute- or memory-intensive processes are not permitted**
- Heavy processes will be terminated **without warning**
- **Submit Slurm batch jobs** to run application codes on compute nodes

# Support Policies

We offer timely response with **direct assistance** or **escalation processes**

- Support is **limited to the scope** of your project proposal
- We cannot guarantee the resolution of all issues

**Supported community codes** and user applications

- We are committed to help you run up-to-date supported community codes  
CSCS staff cannot fix application-specific issues
- Best-effort support deploying and optimizing user applications

**Prioritization** case impact, complexity, knowledge transfer, time to solution

**Collaborative support** consult online docs and provide detailed information

# Resource Allocation Policies

Computing time on vClusters is allocated and accounted in **node hours**

- Resources are assigned in **three-month windows**
  - **Quotas are reset** on April 1st, July 1st, October 1st and January 1st
- Try to use your compute budget evenly and consistently across the windows
- Unused resources in a given window **cannot be transferred to the next**

More information on **Policies** at <https://confluence.cscs.ch/x/UQBYLw>



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# Service Catalogue

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# Multi-factor authentication and SSH connections

Users are required to authenticate using [multi-factor authentication \(MFA\)](#)

- MFA implemented at CSCS as **two-factor authentication**
- Users receive an email with the details about the procedure
  - One factor is the **user login and password pair** ("thing you know")
  - The other factor is the **one-time password** (OTP, "thing you have")

MFA applies to web-based services and SSH connections

- CSCS supports MFA authenticators that follow [the TOTP open standard](#)
- SSH is only possible with keys generated by the CSCS [SSHService](#)
- **Keys are valid for 24 hours**, after which a new key must be generated

More on [MFA](#) at <https://confluence.cscs.ch/x/VwBYLw>

# Programming Environment

We provide several ways to build software for running on vClusters

- **uenv** developed and fully supported at CSCS
- Cray Programming Environment (CPE) supported via HPE/Cray
- Containers (often a good choice for machine learning workloads)

**No modules** are loaded by default at login!

- You need to load the module **cray** first with the following command  
**module load cray**
- Then the modules available in the default CPE can be listed with  
**module avail**

More on **CPE** at [https://confluence.cscs.ch/x/\\_gD0E](https://confluence.cscs.ch/x/_gD0E)

# uenv: User Environments

**uenv** provide programming environments and application software

Typically application-specific, domain-specific or tool-specific

- **uenv** contains only what is required for the application or tool to run
- CSCS provides some ready-made and supported user environments
- Advanced users can create their own **uenv** with the tools provided

Packaged in a single **squashfs** file

- Can be shared in an artifactory or stored on a file system
- Independent of each other and of CPE
- Built on top of the base image, not the CPE

# uenv: Tools

## Command Line Interface (CLI)

- **uenv** command line tool for environments
- **uenv image find** search for uenv image that can be pulled

Slurm plugin at <https://github.com/eth-cscs/slurm-uenv-mount>

- Manages the loading of images on compute nodes

Stackinator at <https://eth-cscs.github.io/stackinator>

- Tool for generating images from a declarative recipe

Github with CSCS images at <https://github.com/eth-cscs/alps-spack-stacks>

- CI/CD pipeline to build, test and deploy images

# uenv: Mount Points

## /user-environment

- **Programming environments**

Compilers, libraries, profilers (e.g.: HDF5, FFTW, MPI, OpenBLAS...)

Can be application specific (e.g.: supporting ICON builds)

- **Application environments**

CP2K, GROMACS, LAMMPS, NAMD, QuantumEspresso, VASP...

## /user-tools

- **Supporting tools**

- Debuggers (DDT)

- Text editors

- Visualization (ParaView, Visit, ...)

# uenv: Benefits for You

## Single image in a SquashFS file

- Managed in a registry/artifactory
- Performance decoupled from file system

## Defined by a **simple declarative recipe**

- The same environment can be easily rebuilt
- Useful after system upgrades

## Small set of system dependencies

- Only need to rebuild if **libfabric** or **Slurm** are changed

More on [uenv](https://confluence.cscs.ch/x/bYDTKQ) at <https://confluence.cscs.ch/x/bYDTKQ>

# Container Engine

Container Engine **runs Linux containers** on HPC environments

- Developed following the specific requirements of HPC systems
- Spawns isolated containers built by users for a specific application
- Extensible runtime by means of OCI hooks for custom hardware

Compatible with the [Open Container Initiative \(OCI\)](#) standards

- Pulls from registries with OCI Distribution Specification or Docker
- Imports and convert images with the OCI Image Format (e.g. Docker)
- Uses an OCI-compliant runtime to spawn the container process

More on [Container Engine](#) at <https://confluence.cscs.ch/x/B4BFLg>

# Continuous Integration / Continuous Deployment (CI/CD)

CI/CD to **build containers** and run them at CSCS

- Dockerfile with build instructions
- Name for the container in the registry
- The build will be taken care by the CI implementation

**Pipelines:** git providers with [webhooks](#) (GitHub, GitLab, Bitbucket)

- A typical pipeline consists of at least one build job and one test job
- Build job: a new container with your most recent code changes is built
- Test job: the new container is run within an MPI job

More on [CI/CD](#) at <https://confluence.cscs.ch/x/UAXJMw>

# FirecREST

FirecREST is a RESTful API for managing HPC resources at CSCS

- Integrate FirecREST into **web-enabled portals and applications**
- Securely **access CSCS services** (job submissions, data transfer,...)
- Hands-on introduction with [PyFirecREST](#)
  - Python wrappers for the [FirecREST API](#) to showcase its functionality

HTTP requests to perform various operations

- Basic **system utilities** like ls, mkdir, mv, chmod, chown,...
- Actions with the **Slurm** workload manager (submit, query, cancel jobs)
- **Data transfer**: internal (between CSCS systems) and external

More information on [FirecREST](#) at <https://confluence.cscs.ch/x/ewBWM>

# Interactive Computing with JupyterLab

[JupyterLab](#) is the web-based user interface for [Project Jupyter](#)

- Create and share **documents with live code**, equations, visualization, ...
- Ability to work with multiple documents using tabs or splitters side by side

We have refactored the [JupyterHub](#) implementation for higher performance

- It will be available soon on our three large vClusters
- Notebook servers are launched on compute nodes
- Much improved performance as Python components are on SquashFS
- Integration with **uenv**: add your kernels based on virtual environments

More on [JupyterLab](#) at <https://confluence.cscs.ch/x/fQBWM>

# Storage Resources: Capacity Storage

Most vClusters on Alps mount the capacity storage (**capstor**) as scratch file system

- 100 PB Lustre built on spinning disks
- **Best I/O performance on large files**
- Raw performance
  - 1 TB/s I/O bandwidth**
  - 300K write IOPS and 1.5M read IOPS



# Storage Resources: Flash File System

The ML Platform also mounts the flash file system iopstor

- 3 PB Lustre filesystem built on Flash memory
- High **Input/Output operations per second (IOPS)**
- Raw performance  
240 GB/s write and 600 GB/s read bandwidth  
**13 M write IOPS and 18.4 M read IOPS**



# Storage Resources: /users and /capstor/store

Storage for datasets, code and scripts

- Access **r+w** from the User Access Nodes (UAN)
- Better performance with larger files (archive small files with **tar**)

## Permissions and data retention

- Folders **backed up**: data retention until 3-months after projects end

Environment variables for quick access

- **\$HOME** pointing to personal folder **/users/\$USER**
- **\$PROJECT** and **\$STORE** pointing to User Lab folder under **/capstor/store**

More on [File Systems](https://confluence.cscs.ch/x/w4DOLg) at <https://confluence.cscs.ch/x/w4DOLg>

# Data Transfer

Data transfer service to get files from/to CSCS file systems ([External Transfer](#))

- Service implemented using the [Globus Online Endpoint](#)
- The CSCS endpoint requires authentication with CSCS credentials

Data mover service with the dedicated Slurm **xfer** queue ([Internal Transfer](#))

- The service submits jobs on the **datamover** cluster at no charge

More information on [Data Transfer](#) at <https://confluence.cscs.ch/x/IIBOLw>

# Long Term Storage

Storage repository with **long term retention** capabilities

- Provide **persistent identifiers (PID)** and set public access if needed
- Data easily **accessible from a web browser** (HTTPS protocol)
- RESTful API to **integrate with third party** applications
- Scalable service that can cope with **large volumes** of data
- **Resiliency** due to data protection measures against failures

User Lab: up to 2 TB of LTS storage quota (for 10 years) free of charge per project

More information on [Long Term Storage](https://confluence.cscs.ch/x/p4BOLw) at <https://confluence.cscs.ch/x/p4BOLw>



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# Documentation

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# CSCS User Portal decommissioned



Documentation migrated  
CSCS Knowledge Base  
<http://docs.cscs.ch>

Announcements on  
CSCS Status Page  
<https://status.cscs.ch>

- HOME
- Getting Started
- Scientific Computing
- Storage
- Tools

- USEFUL LINKS
- Account and Resources Tool
- CSCS Website
- Events
- Tutorials
- Production Repository
- CSCS Service Desk

## Latest News

### 31.01.2025 User Portal decommissioned

Following Piz Daint (Cray XC) decommissioning, also the User Portal has been decommissioned and it is no longer updated, since the documentation has been migrated to the [CSCS Knowledge Base \(KB\)](#). Please refer to the [CSCS Status Page](#) for announcements and feel free to access the [CSCS Users Slack](#) to join the CSCS Users community online.

### 24.01.2025 FirecREST service updates

After Piz Daint (Cray XC) decommissioning and login nodes closure on January 31 2025 (EOB), the FirecREST instance of Daint-XC and Eiger at <https://firecrest.cscs.ch> will be removed.

The new FirecREST interface for Alps vClusters ([daint.alps](#) and Eiger) will be moved to the [CSCS Developer Portal](#): the portal is already available, therefore you can start migrating your workflows immediately. Please note that FirecREST credentials created on the [OIDC Client Registration Dashboard](#) can be migrated to the portal: access to the dashboard will be granted until February 19 2025.

**Please note that the clients NOT migrated by February 27 2025 will be removed.**

For more information on how to access these systems and other platforms, please see [FirecREST for Alps](#) and [How to create FirecREST clients on the Developer Portal](#).

### 16.01.2025 Update on the decommissioning of Piz Daint (Cray XC)

As previously announced to Piz Daint users mailing list, Piz Daint (Cray XC) compute nodes have been reserved at midnight of January 15, to prevent jobs from running. Access to the login nodes of the Cray XC will remain available until January 31, to provide users with a final opportunity to copy relevant and necessary data from the Home and Scratch filesystems. The access to the login nodes of the Cray XC will be closed on January 31 (EOB).

## Latest News

- 31.01.2025 User Portal decommissioned
- 24.01.2025 FirecREST service updates
- 16.01.2025 Update on the decommissioning of Piz Daint (Cray XC)
- Planned Interventions
- Recent Outages
- Back to top

# CSCS Knowledge Base (KB) at <https://docs.cscs.ch>

The KB replaces the User Portal

- Online Documentation can be **searched** easily with Confluence
- **Articles** displayed in panels following User Portal names
- New sections **How-to-articles** and **Troubleshooting articles**

The screenshot displays the CSCS Knowledge Base interface. At the top left is a 'Live Search' section with a search bar containing the text 'Please search the Knowledge Base here'. Below the search bar, instructions explain search syntax: 'Combine terms with AND and OR, exclude words with NOT or minus (-), use wildcards \* and ? to replace characters and ~ for fuzzy or proximity search. Find out more on the Confluence Search Syntax'. To the right is a 'Q & A' section with links for 'Frequently Asked Questions (FAQ)', 'How-to articles', and 'Troubleshooting articles', along with a link to 'Submit a request on the CSCS Service Desk'. Below these are several category panels: 'Access and Accounting' (with links for 'Access to CSCS Systems', 'Access to CSCS Systems for MLP Users', and 'Account and Resources Management Tool'), 'Programming Environment' (with links for 'Containers' and 'uenv user environments'), 'Storage' (with links for 'Data Recovery', 'Data Transfer', and 'File Systems'), 'User Guides' (with links for 'Alps (Clariden) User Guide', 'Alps (Eiger) User Guide', and 'Daint'), 'Scientific Applications' (with links for 'CP2K', 'GROMACS', and 'LAMMPS'), and 'Tools' (with links for 'Continuous Integration / Continuous Deployment', 'Debugging', and 'Performance Analysis'). Each category panel includes a 'More articles in [Category Name]' link.



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# Troubleshooting

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# What to do in case of trouble?

Access the CSCS Service Desk at <https://support.cscs.ch>

The screenshot shows the CSCS Service Desk website. At the top, there is a dark green header with the text "CSCS Service Desk" on the left, a search icon, and a "Log in" button on the right. Below the header, the CSCS logo (a red and white diamond pattern) is on the left, followed by the text "CSCS Centro Svizzero di Calcolo Scientifico Swiss National Supercomputing Centre". On the right, the "ETH zürich" logo is displayed. A large light gray banner in the center contains the text "Welcome to the CSCS Service Desk! How can we help you?". Below this banner, a section titled "Useful links" contains four red text links: "CSCS Users Slack", "Knowledge Base", "Status Page", and "Tutorials". A light gray box below the links contains a blue "Login first!" button, followed by the text "You are currently not logged in. Please [login here](#) to submit a request and view your current and past requests." Below this, the text "Lost credentials or no account?" is followed by "If you have lost your credentials, if your account is not accessible or if you do not have an account, you can [contact us here](#)."

# How to submit a support request

Useful links to documentation and status available online

- Knowledge Base (KB) at <https://docs.cscs.ch>
- Status Page at <https://status.cscs.ch>
- Tutorials at <https://www.cscs.ch/publications/tutorials>

Submit a support request **if you can't find a solution** in the documentation

- **Login first** using your CSCS credentials
- The contact form should only be used if you cannot login

More on [How to submit a support request](https://confluence.cscs.ch/x/LYH8LQ) at <https://confluence.cscs.ch/x/LYH8LQ>

# Request types in the CSCS Service Desk

Requests types are only available after logging in

- Choose the best matching **request type**
- Use the type **Other requests** only if you can't find a match
- A better match will help us react faster

Please select a request type to open a case



## Accounting

Administrative requests regarding your user or project accounts



## Cloud

Questions regarding the openstack cluster Castor



## Connection

Questions regarding SSH connections and keys using multi-factor authentication (MFA)



## Network

Questions regarding SSL certificates, firewalls, servers



## Scientific Applications

Questions regarding supported applications and libraries



## Software Environment

Questions regarding compiling software, containers, user environment, interactive computing and visualization



## Storage and Filesystems

Questions regarding backup, data transfer (globus, xfer), filesystem performance, object storage



## System and job scheduling

Questions regarding system related issues with batch jobs and remote workflows (e.g. Unicore)



## Other requests

Other requests for support

# Example of a good support request

## Summary

- Matching articles that might help will pop-up from the KB as you type

## Description

- Please provide the information needed to **reproduce the issue**
- Include the **Slurm jobid** and the path to the **Slurm job script**
- Copy scripts and source files to **\$SCRATCH** and give us the necessary permissions to access

### Summary

Slurm job failed with error "..."

### Description

Aa ▾ | B I ... | ☰ ▾ | 🔗 <> + ▾

My username is `<user name>`, I submitted the job `<job ID>` on `<system>`. The job running `<code name>` exited with state **FAILED**. The job script (`<script name>`) and input files (`<file list>`) can be found in `$SCRATCH/failed_job`, I have already given read access to with the command `chmod -R +r $SCRATCH/failed_job`.  
The instructions to reproduce the issue are ...

Please include the Slurm JobIDs of the batch jobs and briefly describe your workflow

### System

Type to search ▾

### Project

csstaff (reporter) × ▾

### Attachment (optional)

📎 Drag and drop files, paste screenshots, or  
browse

# Monitoring your requests

Cases in the Service Desk:

- **Filter** the list of cases
- Check case **status**
- **Review** the messages

Select a specific case:

- **Share** with other users
- **Resolve** the case if solved
- **Cancel** if sent by mistake

The screenshot displays a 'My cases' interface. At the top, there are two filter dropdowns: 'Open requests' and 'Created by anyone'. Below these is a table with columns for 'Type', 'Reference', 'Created', and 'Summary'. A specific case is selected, showing its title '[dom] Error using CDT 22.09 with PrgEnv-nvidia' and ID '(SD-57760)'. The case status is 'IN PROGRESS'. Below the title is a comment box and an 'ACTIVITY' section. The activity shows a comment from Luca Marsella (CSCS) on 03/Mar/23 at 11:41 AM, stating 'Thanks Vincenzo Annaloro (CSCS)!'. Below this is a response from Vincenzo Annaloro (CSCS) on 03/Mar/23 at 11:37 AM, saying 'Hi Luca, I'm investigating the problem on DOM about the missing cdt/22.09 on ELOGIN and CNs. Cheers, Vincenzo'. A notification bar indicates 'Your request status changed to: In Progress 03/Mar/23 9:59 AM'. At the bottom, the 'DETAILS' section shows a description: 'Hi, I have re-triggered the regression tests of the non default Cray PE 22.09 loading the module cdt/22.09 after the last intervention on Dom, as I have described in [VCMSA-88](#).'

**Follow the links in the notifications to add comments online to your case  
Replies by email won't be forwarded to your open support requests**



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# Community Slack Space

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# Community Slack Space

CSCS Users Slack <https://cscs-users.slack.com>

A new space for you **to interact with fellow CSCS users**

- **Community** driven approach
- Get **rapid responses** to quick questions
- **Share experiences** and best practices

## Recommendations

- Encourage your team members to join!
- Please always **be kind and considerate** to others
- Misbehaviour could result in a ban from the Slack space



# Channels

The space includes several channels

- **#daint**  
Channel dedicated to the vCluster **daint.alps**
- **#general**  
Default Slack channel for general purpose posts
- **#introductions**  
Learn more about your fellow users and their science

Discover **more channels** on the Slack space

The Slack space **is not** meant for submitting support requests

- Use the CSCS Service Desk at <https://support.cscs.ch>





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# Status Page

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# Status Page at <https://status.cscs.ch>

## The Status Page reports

- Incidents
- Announcements
- Scheduled Events

## Status of resources

- Online services
- Front end system

**Subscribe** to get notifications

The screenshot shows the CSCS Status Page Central Services interface. At the top left is the CSCS logo (a red diamond shape) and the text "CSCS Centro Svizzero di Calcolo Scientifico Swiss National Supercomputing Centre". To the right of the logo is the title "CSCS Status Page Central Services". Below the title is a navigation bar with five items: "Overview" (with a checkmark icon), "Incidents" (with a warning triangle icon), "Announcements" (with a megaphone icon), "Scheduled Events" (with a clock icon), and "Subscribe" (with an envelope icon). Below the navigation bar is a green banner that says "All Resources are Operational". Below the banner is a list of resources, each with a status indicator on the right:

Resource	Status
Front-end availability ⓘ Availability of the front-end Ela (ela.cscs.ch) via SSH	Operational
> Online services CSCS Services accessible online	Operational
> FirecREST	Operational
> CI/CD	Operational

# Useful Links

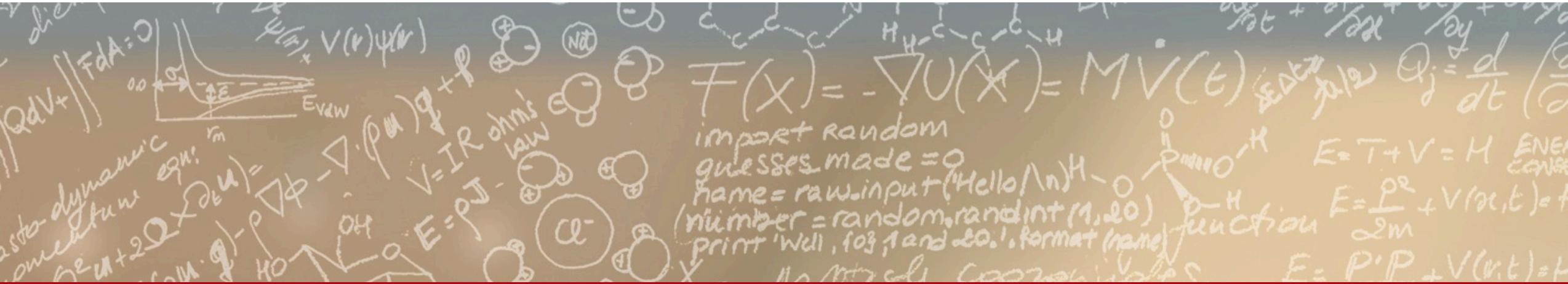
- CSCS Service Desk
  - <https://support.cscs.ch>
- CSCS User Slack
  - <https://cscs-users.slack.com>
- Knowledge Base
  - <https://docs.cscs.ch>
- Status Page
  - <https://status.cscs.ch>



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**Thank you for your kind attention**