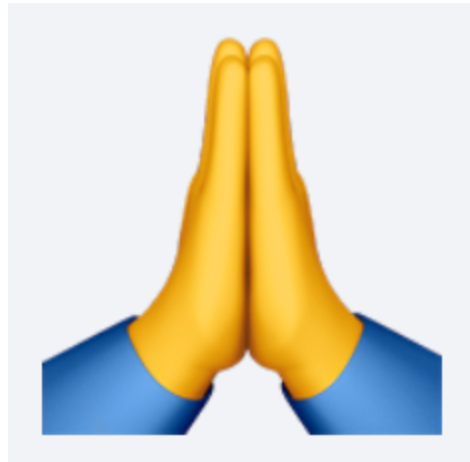


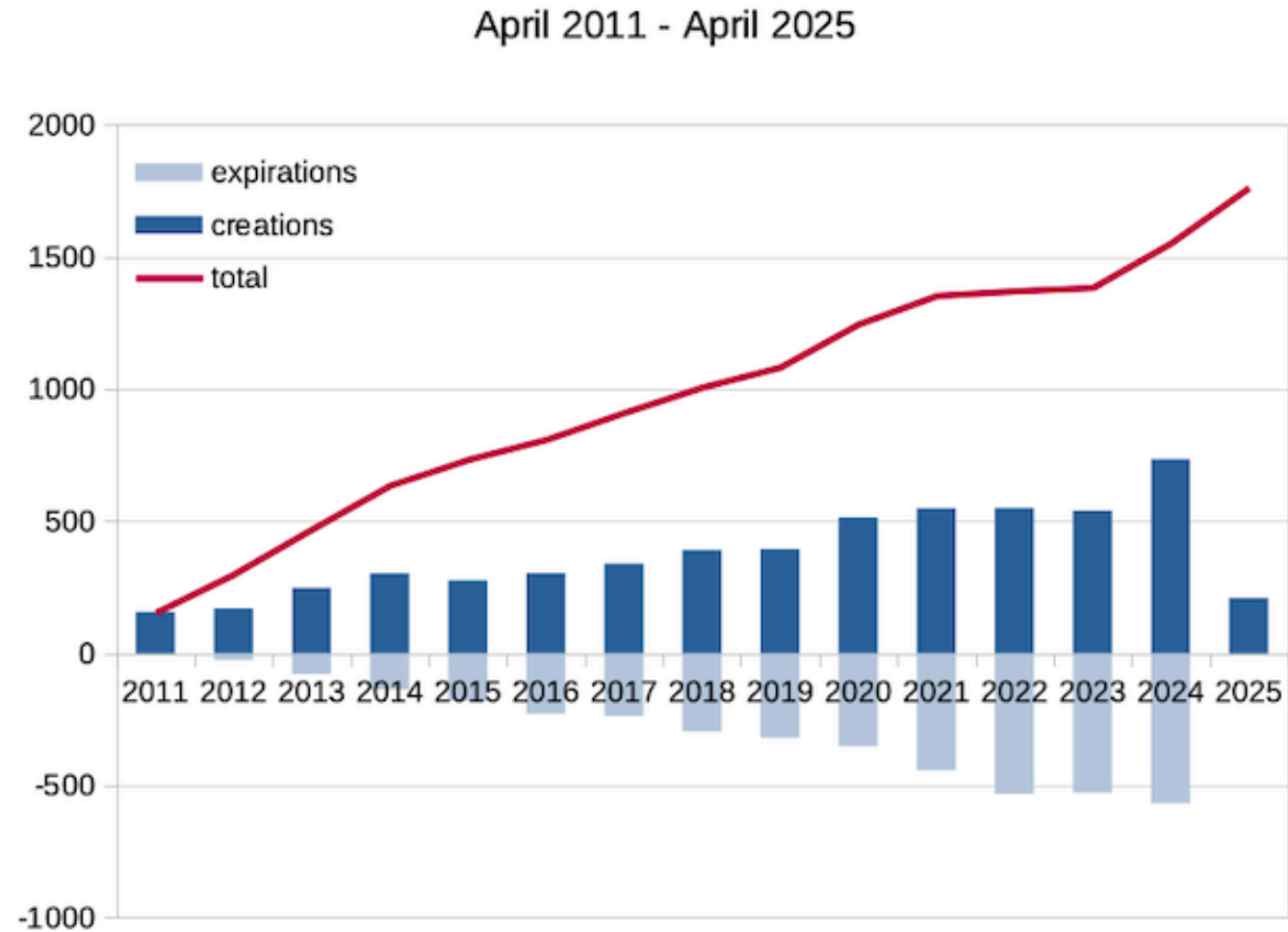
Help us help you



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April 2025 - CÉCI users day - Lîdje

You, the CÉCI users, are legion







We, the CÉCI administrators, are a small team



15 and rawette

Our goals :

-  provide as much uptime as possible for the CÉCI infrastructure
-  accommodate a wide spectrum of workload types
-  maximize resource (CPUs, GPUs, memory) utilization
-  minimize turnaround for your jobs

How can you help us?

 Please spread the word:

1. play along with others
2. prepare your interactions with us
3. be demanding with yourself

play along with others



Know the rules

- the rules of your university
- the rules of the university hosting the cluster you are using
- the rules of CÉCI: <https://www.cec-hpc.be/faq.html#2.5>
- do not harm security
 - **do not share secrets**
 - **do not give access to the clusters to others**

 **The rules exist so that everyone's data are safe and secure**

Be cooperative

- agree to be registered to mailing lists for announcements related to the infrastructure or events we organise (a dozen email per year) and **read the emails**
- participate in the CÉCI **user days**, take the **surveys**
- **acknowledge** the CÉCI and other providers in your publications that use their infrastructure: <https://www.cec-hpc.be/faq.html#2.4>

 **All this is important when requesting funding for the clusters**

Do not game the system

- when we enforce something on users it is always to ensure fairness among users
- more constraints hinders performances and harms complex workflows
- stalking other users does not help; their science is as important as yours

Loss of trust ultimately results in loss of resources

Be thoughtful of others

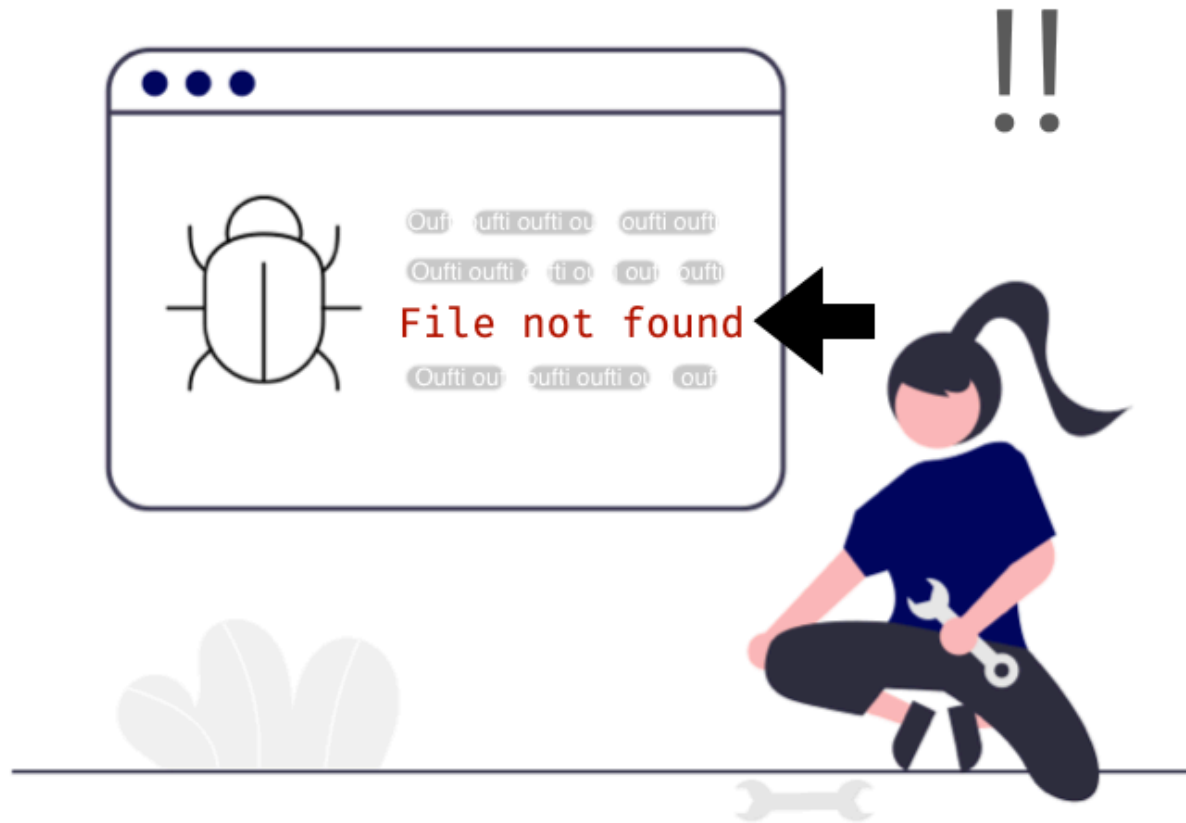
avoid problem-generating workflows:

- Running anything CPU- or memory-intensive on the login node
- Submitting large amounts of jobs or large jobs without testing at a smaller scale first
- Performing excessive I/O on a global filesystem rather than on a local filesystem
- Leaving typos in the email options
- Leaving data on the scratch for ever
- Under-using allocated resources

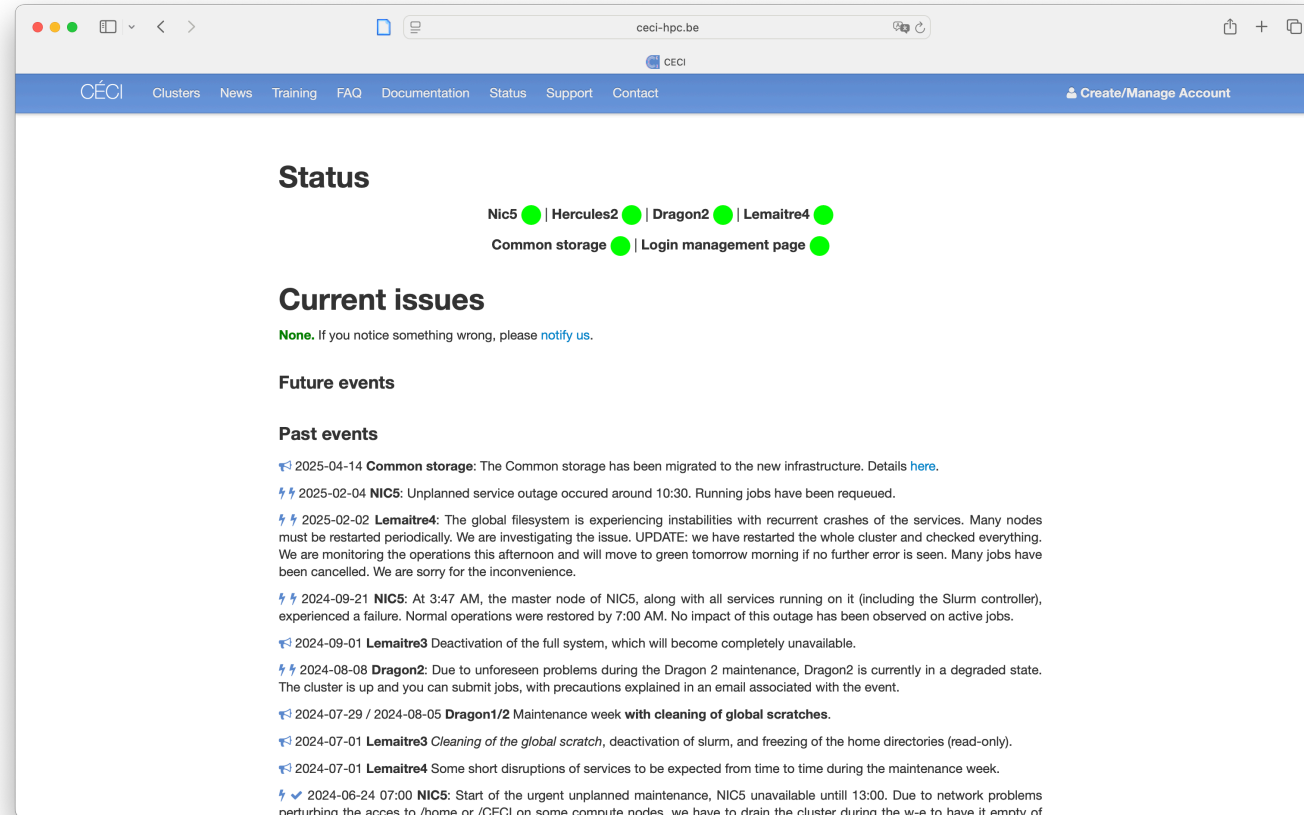
prepare your interactions with us



🤔 1. Start with your due diligence.



🤔 1. Start with your due diligence.



The screenshot shows a web browser window with the URL `ceci-hpc.be`. The page has a blue header with navigation links: Clusters, News, Training, FAQ, Documentation, Status, Support, and Contact. A 'Create/Manage Account' link is on the right. The main content area is titled 'Status' and shows a row of green status indicators for Nic5, Hercules2, Dragon2, Lemaitre4, Common storage, and Login management page. Below this is a 'Current issues' section with the text 'None. If you notice something wrong, please [notify us](#).' The 'Future events' section is empty. The 'Past events' section lists several incidents with dates and descriptions, including a common storage migration, a NIC5 outage, and various maintenance events for Dragon2 and Lemaitre3/4.

Status

Nic5 ● | Hercules2 ● | Dragon2 ● | Lemaitre4 ●
Common storage ● | Login management page ●

Current issues

None. If you notice something wrong, please [notify us](#).

Future events

Past events

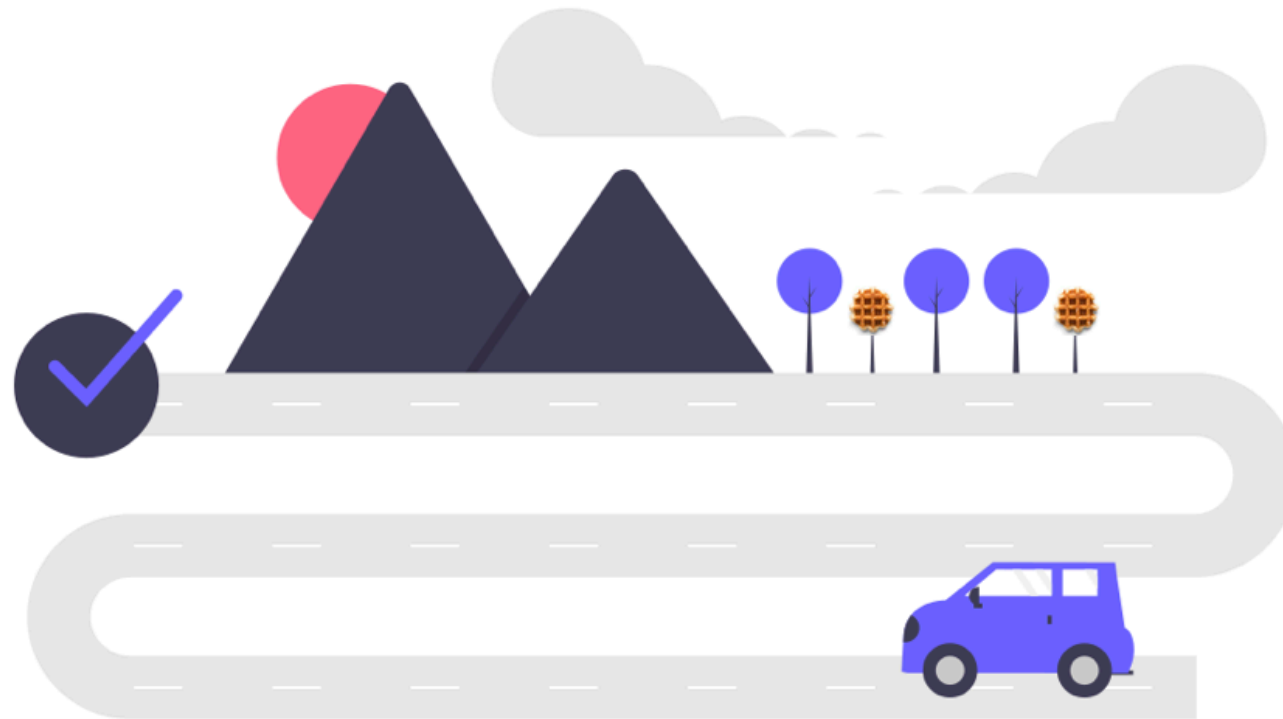
- 📅 2025-04-14 **Common storage:** The Common storage has been migrated to the new infrastructure. Details [here](#).
- ⚡ 2025-02-04 **NIC5:** Unplanned service outage occurred around 10:30. Running jobs have been requeued.
- ⚡ 2025-02-02 **Lemaitre4:** The global filesystem is experiencing instabilities with recurrent crashes of the services. Many nodes must be restarted periodically. We are investigating the issue. UPDATE: we have restarted the whole cluster and checked everything. We are monitoring the operations this afternoon and will move to green tomorrow morning if no further error is seen. Many jobs have been cancelled. We are sorry for the inconvenience.
- ⚡ 2024-09-21 **NIC5:** At 3:47 AM, the master node of NIC5, along with all services running on it (including the Slurm controller), experienced a failure. Normal operations were restored by 7:00 AM. No impact of this outage has been observed on active jobs.
- 📅 2024-09-01 **Lemaitre3** Deactivation of the full system, which will become completely unavailable.
- ⚡ 2024-08-08 **Dragon2:** Due to unforeseen problems during the Dragon 2 maintenance, Dragon2 is currently in a degraded state. The cluster is up and you can submit jobs, with precautions explained in an email associated with the event.
- 📅 2024-07-29 / 2024-08-05 **Dragon1/2** Maintenance week **with cleaning of global scratches**.
- 📅 2024-07-01 **Lemaitre3** *Cleaning of the global scratch*, deactivation of slurm, and freezing of the home directories (read-only).
- 📅 2024-07-01 **Lemaitre4** Some short disruptions of services to be expected from time to time during the maintenance week.
- 📅 2024-06-24 07:00 **NIC5:** Start of the urgent unplanned maintenance, NIC5 unavailable until 13:00. Due to network problems perturbing the access to /home or /CECI on some compute nodes, we have to drain the cluster during the w-e to have it empty of

2. Use the correct channel








The screenshot shows the CÉCI website interface. The navigation bar at the top includes links for 'CÉCI', 'Clusters', 'News', 'Training', 'Support' (circled in red), and 'Contact'. Below the navigation bar, the main header features the CÉCI logo and the text 'Consortium des Équipements de Calcul Intensif' with a subtitle '6 clusters, 10k cores, 1 login, 1 home directory'. The page is divided into several sections: 'About' (describing the consortium and its members: UCLouvain, ULB, ULiège, UMon, and UNamur), 'Videos of the training sessions' (with a megaphone icon and a link to the YouTube channel), 'Latest News' (featuring two articles: 'First call for the Belgian fraction of LUMI compute time' dated Thursday, 07 April 2022, and 'Workshop: managing workflow on HPC clusters' dated Thursday, 03 February 2022), 'Quick links' (a list of links for connecting from Windows/Linux or MacOS, Slurm tutorial, Slurm FAQ, Tier-1 Zenobe quickstart, and Submission Script Generation Wizard), and 'Social media of the CÉCI' (with links to Twitter and LinkedIn accounts). The footer of the page shows the date 'WEDNESDAY, 10 NOVEMBER 2021'.

🎯 3. State the general goal



4. Provide all important information ("five W")

-  **Who:** what is your login?
-  **What:** what job ID, what file, what modules?
-  **Where:** which cluster, which directory?
-  **When:** on which date, at what time?
-  **Why:** what is the problem?

💬 5. Give the exact error (copy/paste from terminal)






Final remarks

- the sooner we hear about a problem the sooner we can work on it
- one problem per request makes it easier to work in parallel
- reporting that a suggested solution does work helps to organise knowledge
- user requests are prioritized based on the **severity** of the problem

be demanding with yourself



Learn the basics before you use the clusters

-  Basics of **Operating systems**
-  Basics of **Text user interfaces and the Terminal**
-  Basics of **Programming**

<https://www.linux.com/what-is-linux/>

<https://frontend.turing.edu/lessons/module-1/getting-around-in-the-terminal.html>

<https://www.makeuseof.com/tag/a-beginners-guide-to-the-windows-command-line/>

<https://www.geeksforgeeks.org/basics-of-computer-programming-for-beginners/>

Attend the training sessions

 Lot of fun! <https://www.ceci-hpc.be/training.html>

Read the doc

 <https://support.ceci-hpc.be/doc/>

Help us help you;
please spread the word

😊 We thank you in advance! 😊