

How SubMIT Provides User Support

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Overview

The SubMIT login pool is designed to let users login safely, prepare and submit their jobs to the large computing resource of their choice. Check out the

- Jupyter
- A2rchi
- Users Guide
- Expert information

[Get your SubMIT Account](#)

[SubMIT Users Guide](#)

[Events](#)

Access

ssh <user>@submit.mit.edu

jupyterhub

Status

Servers

Slurm queue

Condor queue



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User's Guide - subMIT

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Tutorials and Examples

Tutorials:

- [Tutorial 0: Introduction to the UNIX terminal](#)
- [Tutorial 1: Common software packages \(python, Julia, MATLAB\)](#)
- [Tutorial 2: Batch Job \(HTCondor and Slurm\)](#)
- [Tutorial 3: Containers \(Podman and Singularity\)](#)
- [Tutorial 4: Source Control \(Git/Github\) with Visual Studio Code \(VSCode\)](#)
- [Tutorial 5: Debugging Fortran code with Visual Studio Code \(VSCode\)](#)
- [Tutorial 6: Introduction to Pytorch Lightning](#)
- [Tutorial 7: Introduction to Snakemake](#)

Examples of scripts can be found on our [submit-examples GitHub repository](#).

Videos

- [Fast Code / File Navigation in VSCode](#)
- [Debugging on SubMIT with VSCode](#)
- [We have recorded sessions from our 2026 workshop on the different methods to access and interact with SubMIT, as well as how to use containers \(Docker and Podman\), OpenMPI, Globus, Conda, Snakemake, Slurm, and HTCondor with SubMIT.](#)



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Access to SubMIT

- Jupyterhub
- VSCode
 - Getting Started with VSCode on SubMIT
 - SubMIT VSCode

Access to SubMIT

Tags: **JupyterHub** VSCode **GPU**

You have several options to connect to SubMIT, view and edit your files, and do your work. You can watch a **video presentation** on these options by a member of the SubMIT team.

1. **ssh** is the simplest way to connect to the login nodes, see [the starting guide](#).
2. **JupyterHub** `<https://submit.mit.edu/jupyter/hub/spawn>` provides another easy alternative to connect to the cluster. You can log in using your Kerberos ID, and get access to an interactive graphical interface, terminal, text editor, and more.
3. **VS Code** is a powerful code editor that supports remote access through SSH, as well as many languages and extensions.
4. **X2GO** is a remote desktop software
5. **XWin**

You can find

SubMIT Users Meeting - operated by Physics Basic Computing Services

Tuesday 5 May 2026, 10:00 → 11:00 America/New_York

26-414 (Kolker room) (MIT)

Description The SubMIT analysis facility is for anyone in the Physics Department and is a set of servers that provide interactive access to substantial storage at high speeds, enabling sophisticated data analyses with very fast turnaround times. Additionally, it seamlessly integrates massive processing resources for large-scale tasks by connecting to a set of powerful batch processing systems.

More information about SubMIT: <https://submit.mit.edu/>

Zoom Link: <https://mit.zoom.us/j/95199329363>

10:00 → 10:05 Refreshments ¶

5m

10:05 → 10:20 SubMIT Overview & News

15m

Speaker: Marianne Moore (MIT)

SubMIT news video1040446831...

A2rchi

A2rchi converts email into tickets in Cleo and drafts a preliminary answer, based on its training of our User's Guide.

SubMIT directly hosts the LLM, ensuring data privacy, with an open-source model.

A2rchi is used in 2 ways:

- ◆ user can ask questions, link to A2rchi from our website.
- ◆ A2rchi provides draft responses to tickets from users to help the assist project team

The screenshot shows a support ticket titled "Time limit on slurm job" with a status of "CLOSED". The ticket was added by "Artificial Intelligence" 16 days ago and updated 16 days ago. The ticket details include:

- Status: CLOSED
- Priority: Normal
- Assignee: Artificial Intelligence
- Start date: 05/03/2025
- Due date: 05/04/2025
- % Done: 0%
- Estimated time: 1:00 h
- owner-email: [redacted]
- copy-to: -

The description of the ticket is:

Hi, I see when submitting a job on slurm that one of the lines is for time like
#SBATCH --time=10:00
I was wondering what the time limit is or if there is a default time that it will stop at if not specified.

The ticket was updated by "Artificial Intelligence" 16 days ago. The update message states:

• Status changed from **New** to **Feedback**

Hi [redacted]

In Slurm, the '--time' option specifies the maximum wall-clock time your job is allowed to run. If you don't specify a time limit, there is a default time limit set by the system administrators. On subMIT, the default time limit for jobs is usually 24 hours (1 day) if not specified otherwise.

However, it's always a good practice to specify the time limit for your job. This helps in efficient resource management and ensures that jobs that are taking longer than expected can be preempted or terminated to free up resources for other users.

If you expect your job to take more than the default 24 hours, you should explicitly request more time using the '--time' option. For example:

```
--bash
#SBATCH --time=48:00:00
...
```

This would request 48 hours for your job. If you need more time than the default, you should also consider whether your job can be broken down into smaller tasks or if there are ways to optimize its performance.

Let me know if you have any more questions!

Best,
A2rchi



Publications

People

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Contact

The SubMIT project team is available through several channels:

- **General questions and support:** submit-help@mit.edu
- **Slack:** Join the [SubMIT Slack workspace](#) for more interactive discussions
- **Anonymous feedback:** [Submit anonymous comments](#)
- **In-person office hours:** Please email submit-help@mit.edu to schedule a time

In addition to our User Guide and A2rchi



- Jupyter
- A2rchi
- Users Guide
- Expert information**

Expert information

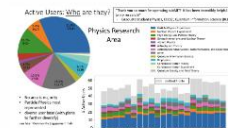
On SubMIT we want to provide full transparency while keeping things simple. On this page, interested users can find inside information of the system. If you have any feedback or touch if you find something missing.

User support



When users send us a mail to submit-help@mit.edu a ticket is created in our redmine system. Here you can find a meta data analysis of our tickets.

System metrics



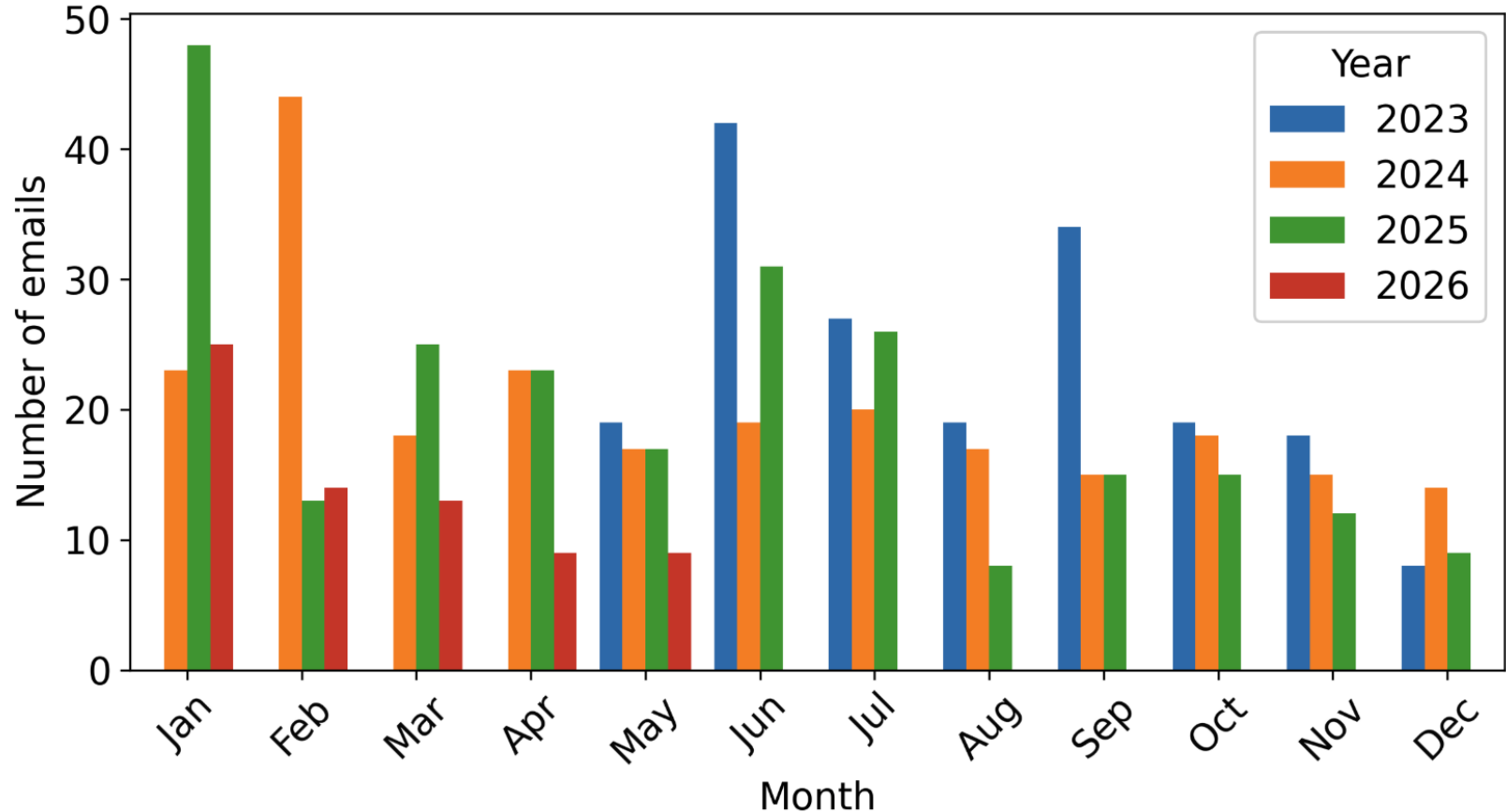
Are wondering who are the people you share the system with? Have a look at our users, what career stage, center and department they are. You can also find the information from the poll you filled when creating the account. And which resources are used.

Backups

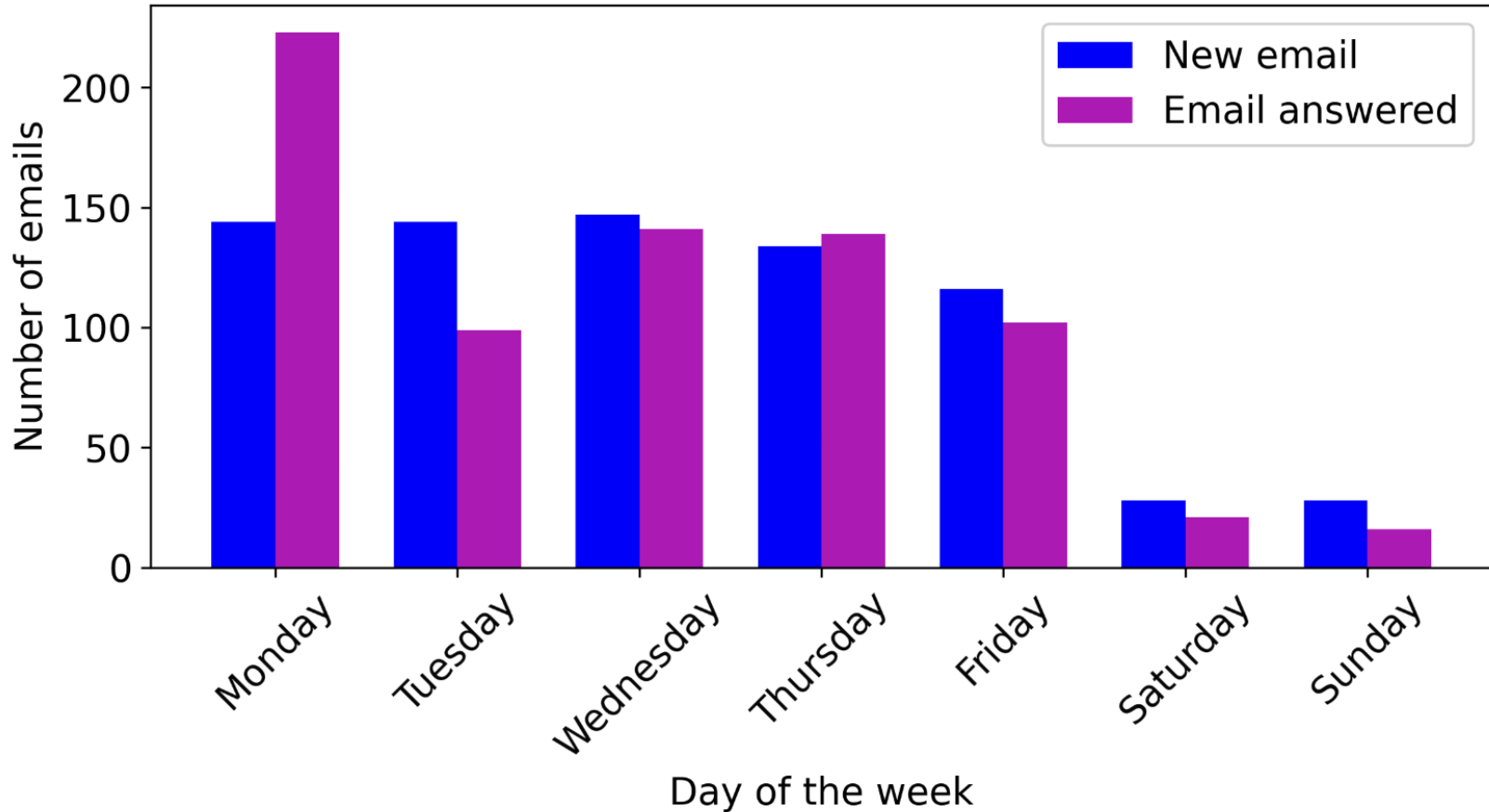


All home directories on SubMIT are daily backed up incrementally, and fully each weekend. Have a look if your home directory got backed up correctly and how much space it consumes!

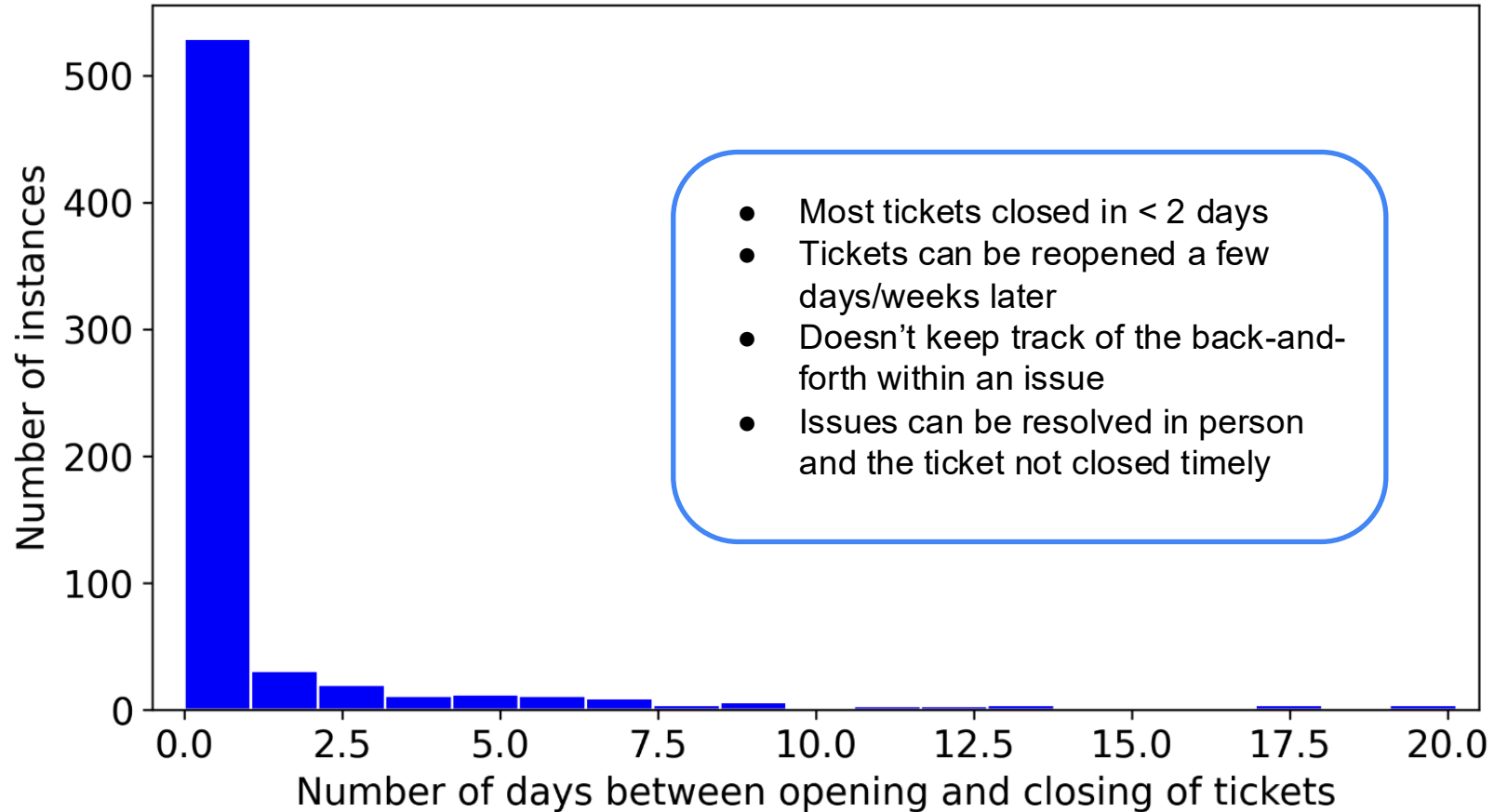
Emails/Tickets: created per month



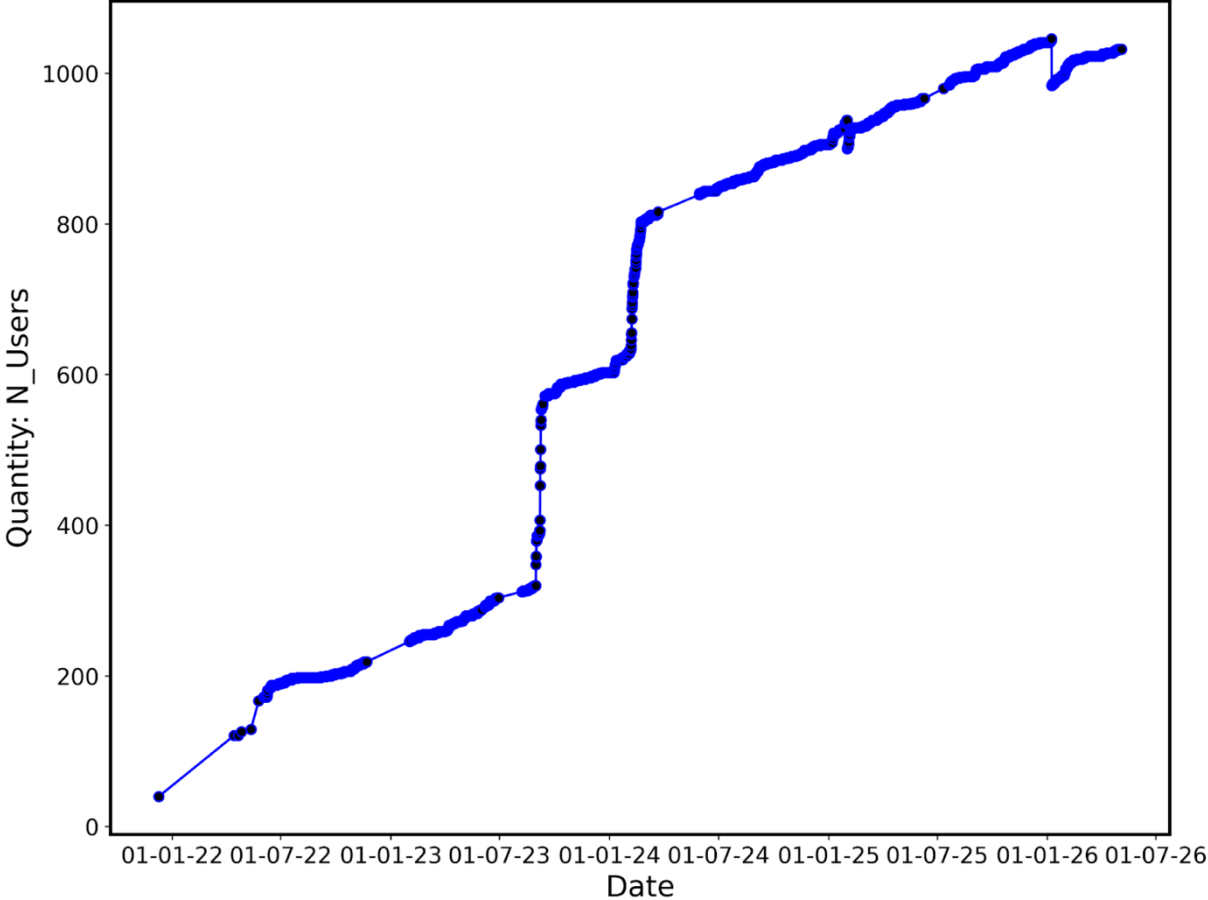
Emails/Tickets: day of the week



Delay between first opening and last closing of tickets



Growth of the User Community



How Users Interact with subMIT

