This figure shows a breakdown of users that use iCER support services. These support services include support tickets, iCER workshops and office hours.

**List of iCER workshops in March:**
- Demystifying Deep Learning: A Practical Approach in MATLAB
- Introduction to HPCC
- Matplotlib for Data Visualization

This figure shows a breakdown of users that use iCER compute services:

- **296 users** (272+24) use the developer nodes to submit jobs to the queue.
- **244 interactive users** (234+10) only use iCER developer nodes to do their work.
  - Only need access to software (ex. Matlab, mathematica)
  - Still in software development process and have not submitted a job
  - Find development nodes are sufficient for their research.
- **26 users** only used the iCER file systems to store their files.
- **270 researchers** (234+10+26) used iCER hardware outside of the batch queue.

This figure shows a breakdown of users that use iCER support services. These support services include support tickets, iCER workshops and office hours.

### iCER SERVICE REPORT

**MAR 2018**

RESEARCHERS USED ICER SERVICES

NUMBER OF USERS USING ICER COMPUTE SERVICES

- **902**
  - **Compute 84%**
  - **Support 32%**

NUMBER OF USERS USING ICER SUPPORT SERVICES

- **170**
- **272**
- **234**
- **24**
- **22**
- **26**
- **3**
- **170**
- **234**

**NUMBER OF USERS USING ICER COMPUTE SERVICES**

- **Developer/Login Nodes**
- **Batch Queue**
- **Mapped Home Drive/Samba**

**NUMBER OF USERS USING ICER SUPPORT SERVICES**

- **Tickets**
- **Workshops**
- **Office Hour**

**194**

**70**

**4**

**1**

**14**

**3**
COMPARISON BETWEEN NUMBER OF USERS USING ICER SUPPORT AND COMPUTE SERVICE

DAILY SCHEDULER ACTIVITY

On a typical day, the scheduler processes approximately 151,920 jobs. This includes jobs that are queued, jobs that start and jobs that end. Put in another way, the scheduler manages approximately 105 jobs per minute.

NUMBER OF MAPPED HOME DIRECTORIES PER SERVER
**TICKET ACTIVITY SUMMARY**

Tickets Created: 283
Tickets Updated: 395
Tickets Resolved: 296
Open Tickets: 20

**TICKET MESSAGE SUMMARY**

Total Users’ Messages: 588
Total iCER’s Messages: 777

**MARCH TICKET HIGHLIGHTS**

NANYE LONG
Research Consultant
SUBMITTING JOBS WITHOUT WRITING QSUB SCRIPTS

**TICKET RESOLUTION STATISTIC**

469 Messages answered in March

- Messages answered within 5 hours: 14%
- Messages answered within 5 - 12 hours: 5%
- Messages answered within 12 hours - 24 hours: 17%
- Messages answered within 24 hours - 2 day: 7%
- Messages answered in more than 2 days: 56%

84 New User Accounts created in MARCH
In an effort to better serve our users, we have been analyzing the software that is being used on the HPC by recording which software modules are being loaded using the “module load” command. Clearly this is not a complete view; many users install their own software in their home directories, some modules are automatically loaded as part of a user profile and there will be a bias toward pleasantly parallel codes which will load their required modules every time a job runs (as compared to bigger jobs which would only load the modules once). However, we find this data interesting and wanted to share it with you.

The pie chart shows the most commonly loaded modules. Note again that the biggest ones are the ones included in a user’s default profile such as MATLAB, Python, and R. These modules get loaded every time they log in or run a job. As can be seen clearly, the default modules get loaded in an order of magnitude more than many of the other modules.

After taking out the default modules, the pie chart on the right shows more modules that users are choosing to include in their .bashrc files and being submitted on a lot of jobs.

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