# iCER SERVICE REPORT

## RESEARCHERS USED ICER SERVICES

**820**

Compute 87%

Support 29%

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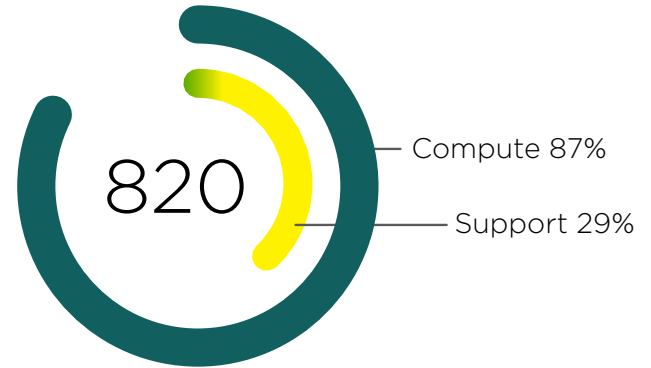
**Developer/Login Nodes**  **Batch Queue**  **Mapped Home Drive/Samba**

## NUMBER OF USERS USING iCER COMPUTE SERVICES

131

324

189

22

15

11

19
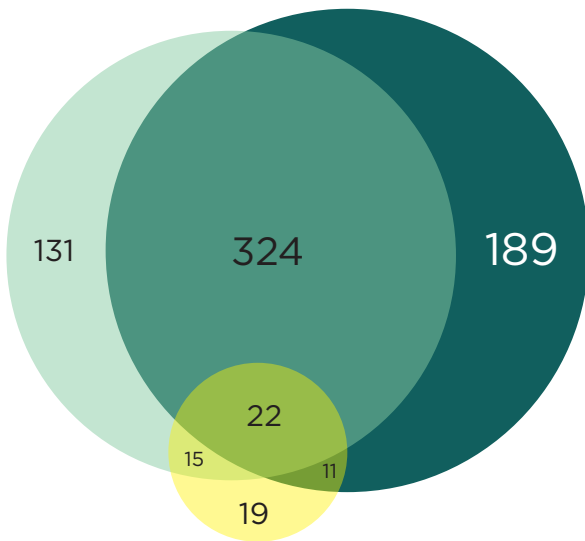
This figure shows a breakdown of users that use iCER compute services:

**346 users (324+22) use the developer nodes to submit jobs to the queue.**

**200 interactive users  (189+11) only use iCER developer nodes to do their work.** This includes users:
> 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.

**19 users only used the iCER file systems to store their files.**

**219 researchers (189+11+19)  used iCER hardware outside of the batch queue.**
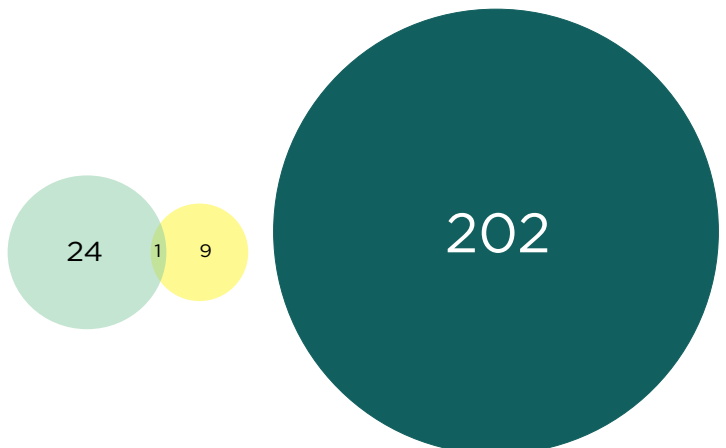
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## NUMBER OF USERS USING ICER SUPPORT SERVICES

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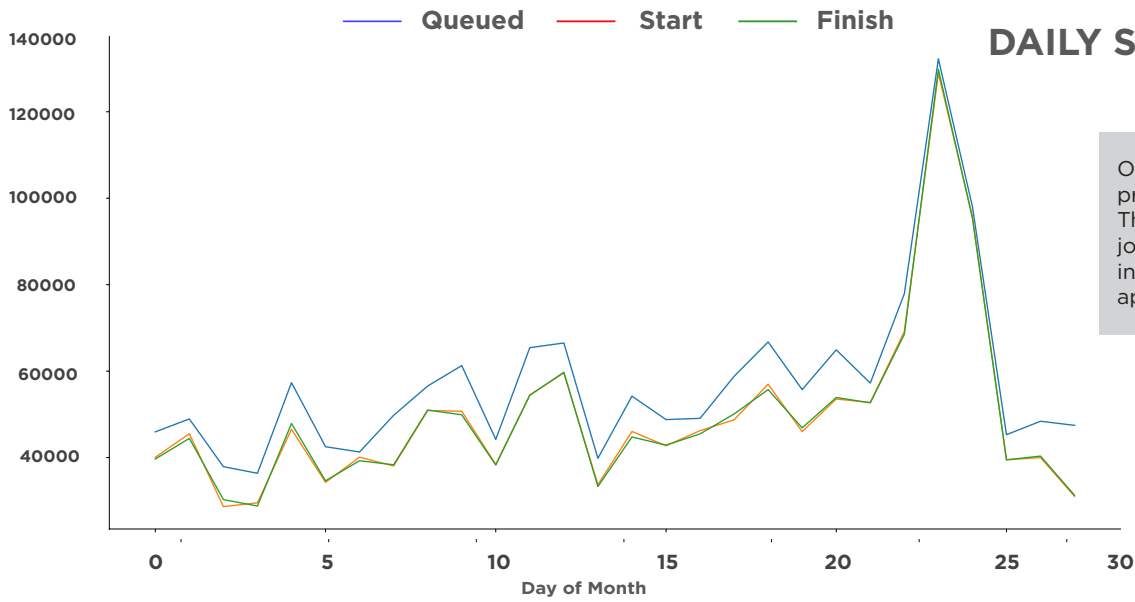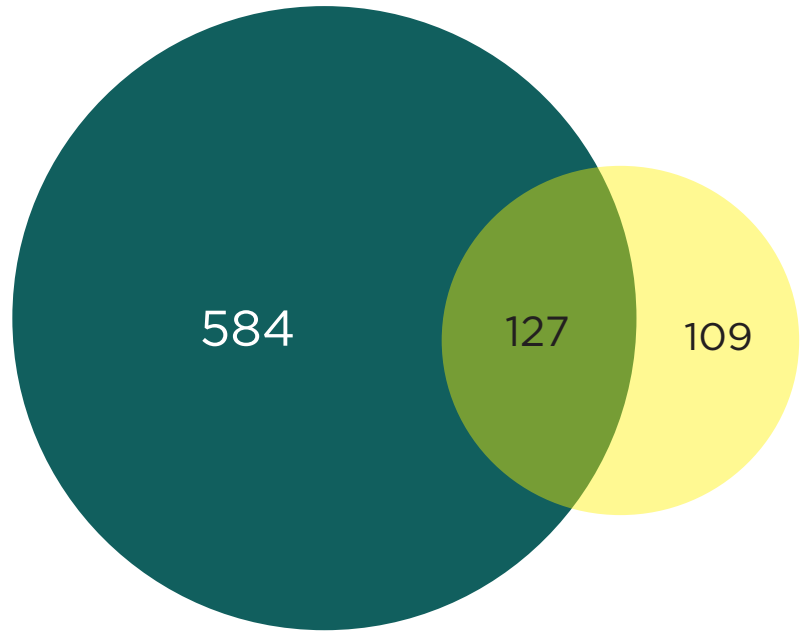
**List of iCER workshops in February:**

> Introduction HPCC
> Research Data Management with Globus

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

24

1

9

202

## COMPARISON BETWEEN NUMBER OF USERS USING ICER SUPPORT AND COMPUTE SERVICE

584   127   109

**Compute**

**Support**

## DAILY SCHEDULER ACTIVITY
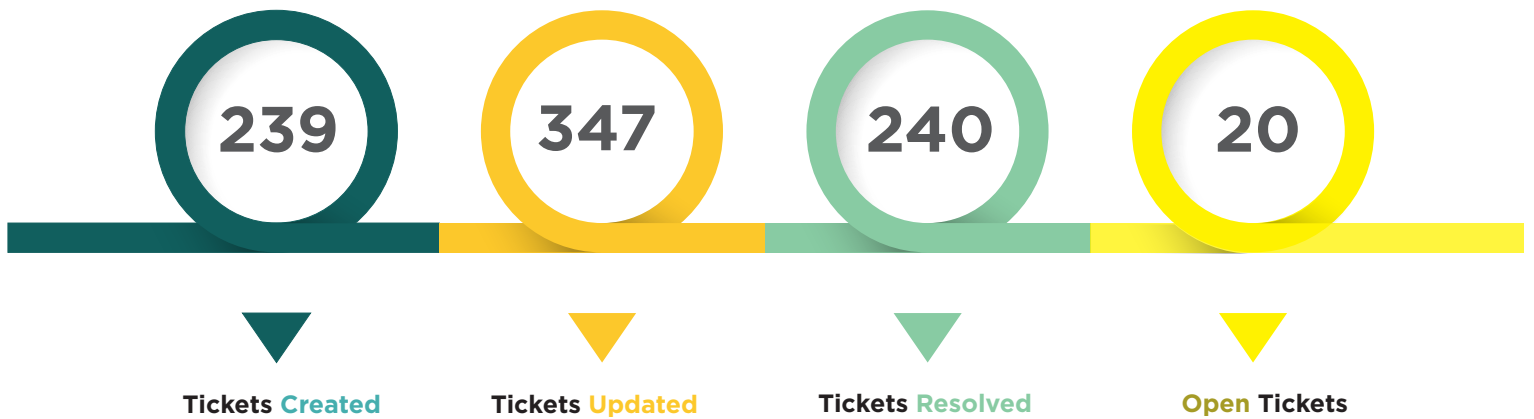
Queued — Start — Finish

On a typical day, the scheduler processes approximately 141,580 jobs. This includes jobs that are queued, jobs that start and jobs that end. Put in another way, the scheduler manages approximately 98 jobs per minute.

Day of Month

## NUMBER OF MAPPED HOME DIRECTORIES PER SERVER

ufs-13-a   ufs-11-a   ufs-11-b   ufs-12-b   ufs-12-a   ufs-13-b
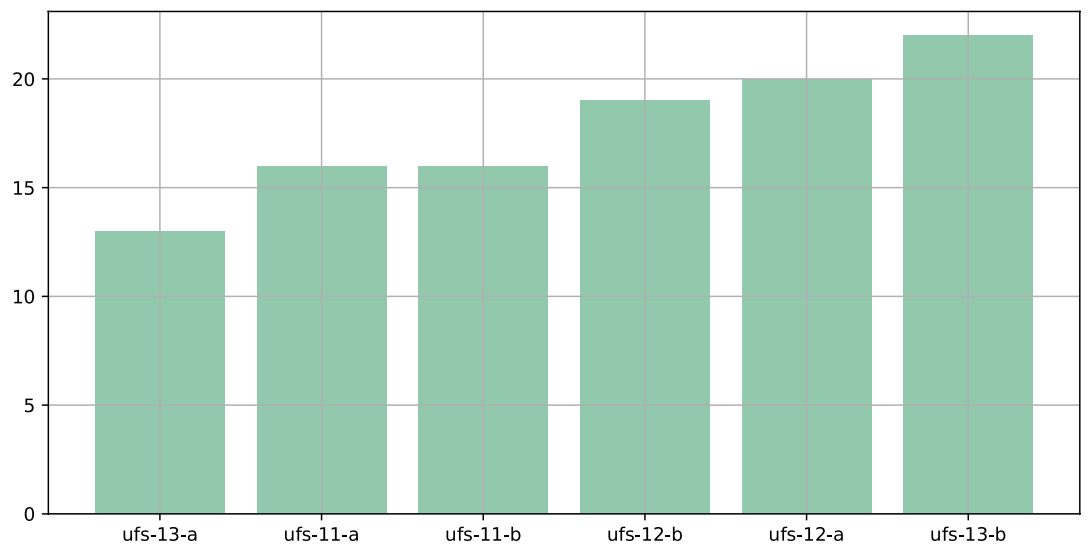
## TICKET ACTIVITY SUMMARY

**239**

**347**

**240**

**20**

Tickets **Created**

Tickets **Updated**

Tickets **Resolved**

**Open** Tickets

## TICKET MESSAGE SUMMARY

**556**
Total Users' Messages

**628**
Total iCER's Messages

## FEBRUARY TICKET HIGHLIGHTS

**XIAOGE WANG**
Research Consultant
**GOOD PRACTICES FOR USING LOCAL DISK SPACE**

## TICKET RESOLUTION STATISTIC

10%

7%

20%

**413**
Messages answered in February

54%

8%
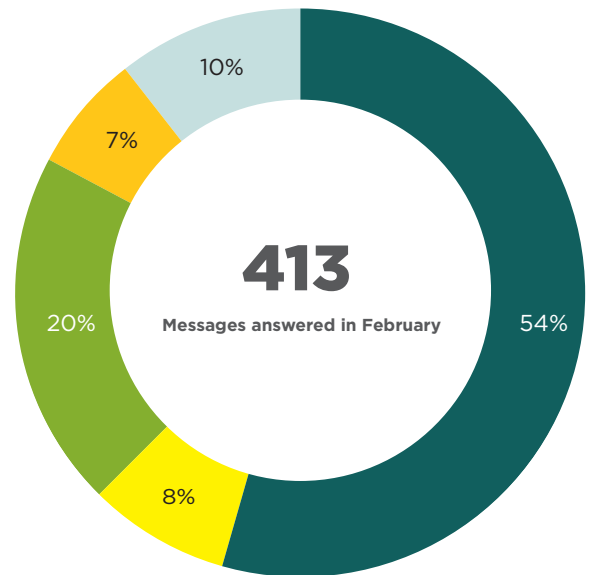
■ Messages answered within 5 hours

■ Messages answered within 5 - 12 hours

■ Messages answered within 12 hours - 24 hours

■ Messages answered within 24 hours - 2 day

■ Messages answered in more than 2 days

**50**
**New User Accounts created**
in FEBRUARY

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.
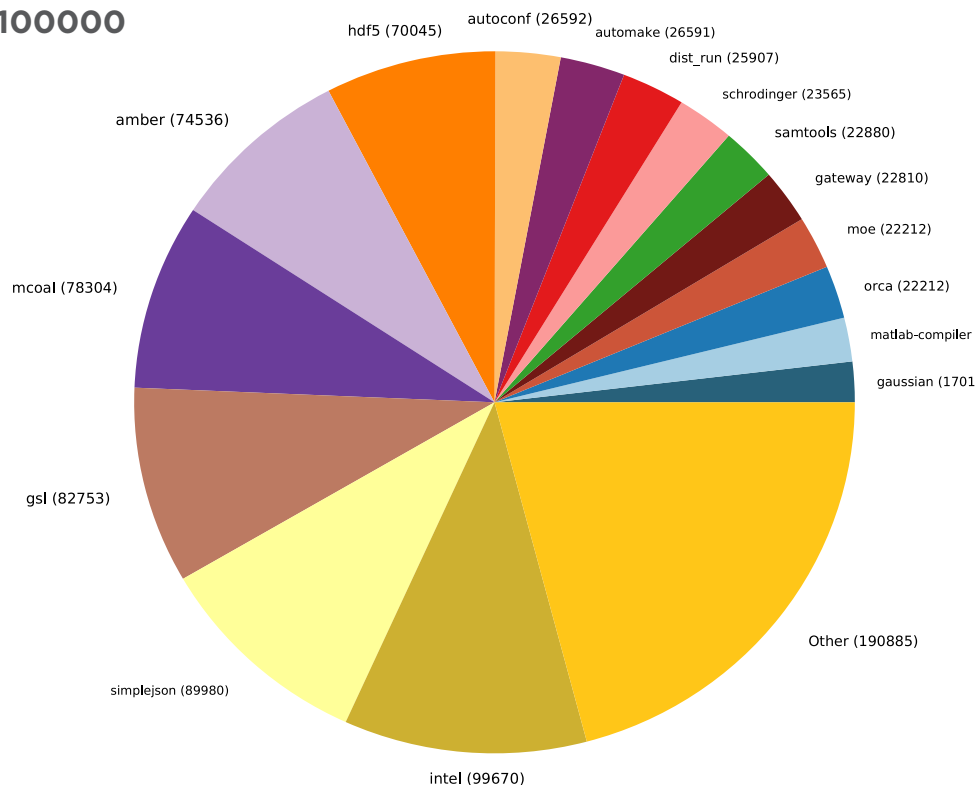
## ALL MODULE LOAD COUNTS <10000000
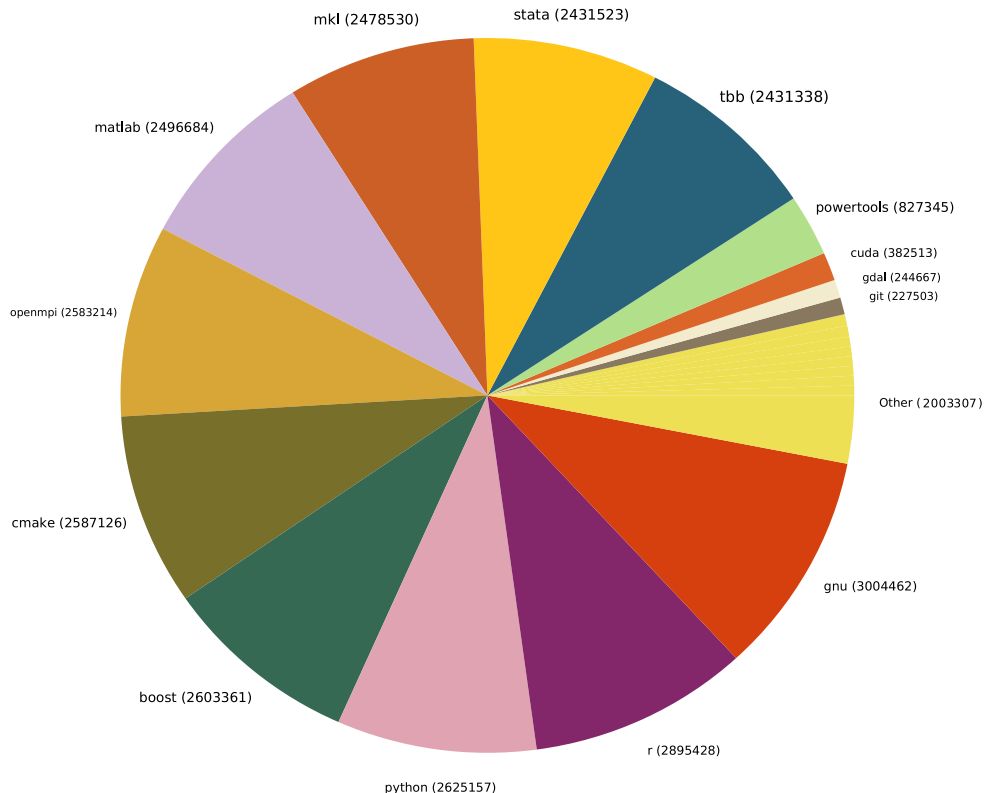
The pie chart shows the most commonly loaded modules.  Note again that the biggest ones are the ones included in a user's default profile such as MATLAB, Python, and R.  These modules get loaded every time they log in or run a job. As can be seen clearly, the default modules get loaded in an order of magnitude more than many of the other modules.

mkl (2478530)
stata (2431523)
matlab (2496684)
tbb (2431338)
powertools (827345)
cuda (382513)
gdal (244667)
git (227503)
openmpi (2583214)
Other ( 2003307 )
cmake (2587126)
gnu (3004462)
boost (2603361)
r (2895428)
python (2625157)

## ALL MODULE LOAD COUNTS <100000

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.

hdf5 (70045)
autoconf (26592)
automake (26591)
dist_run (25907)
schrodinger (23565)
amber (74536)
samtools (22880)
gateway (22810)
moe (22212)
mcoal (78304)
orca (22212)
matlab-compiler
gaussian (1701
gsl (82753)
Other (190885)
simplejson (89980)
intel (99670)

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