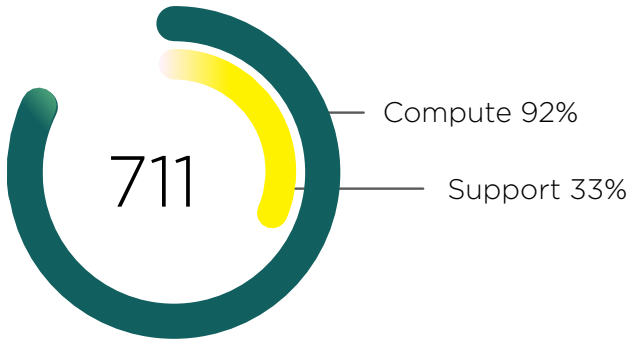
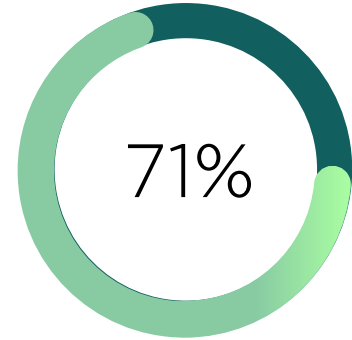


iCER SERVICE REPORT

JUN 2017



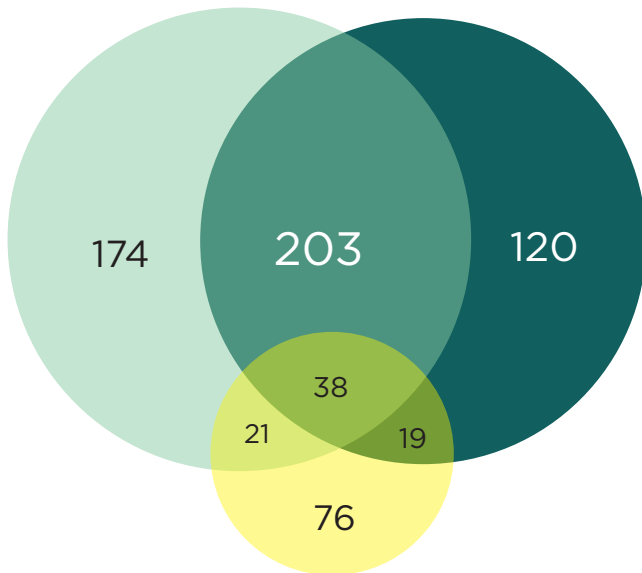
RESEARCHERS USED ICER SERVICES



PERCENTAGE OF BUY-IN ON LACONIA

■ Developer/Login Nodes
 ■ Batch Queue
 ■ Mapped Home Drive

NUMBER OF USERS USING ICER COMPUTE SERVICES IN JUNE



This figure shows a breakdown of users that use iCER compute services:
241 users (203+38) use the developer nodes to submit jobs to the queue.

139 interactive users (120+19) 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.

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

215 researchers (120+19+76) used iCER hardware outside of the batch queue.

**An issue with filer ufs-11-b is preventing us from getting accurate data at this time. We will update the data after the next outage on August 8th.*

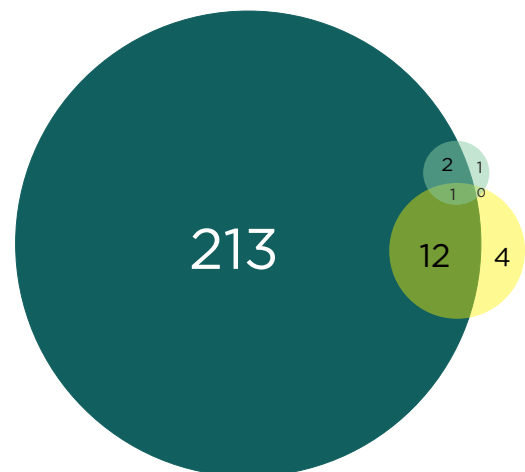
NUMBER OF USERS USING ICER SUPPORT SERVICES IN JUNE

■ Tickets
 ■ Workshops*
 ■ Office Hour

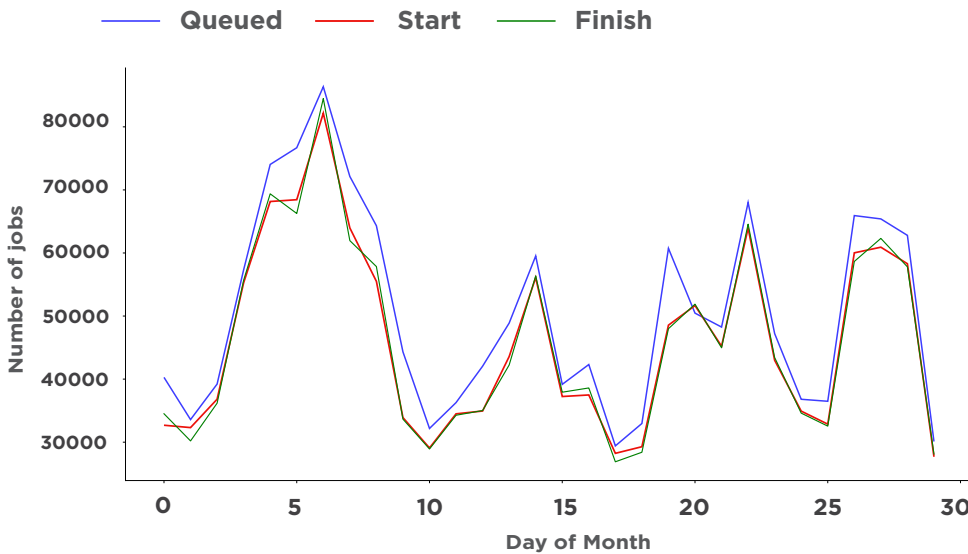
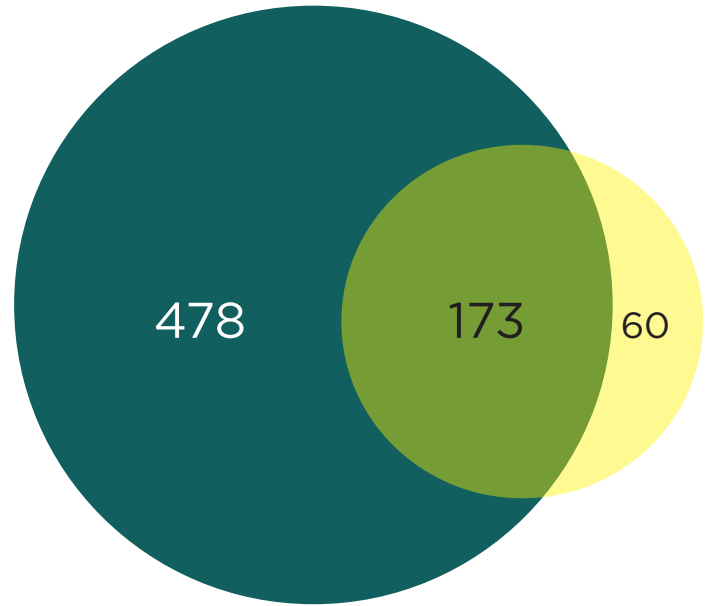
This figure shows a breakdown of users that use iCER support services. These support services include support tickets, iCER workshops and office hours.

List of iCER workshops in Jun:

- > Introduction to HPCC



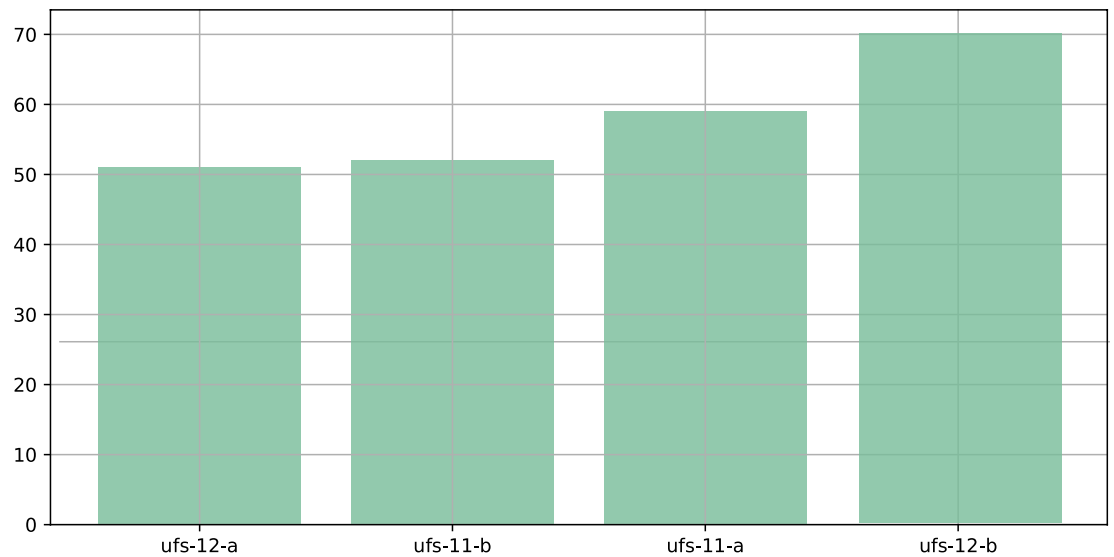
COMPARISON BETWEEN NUMBER OF USERS USING ICER SUPPORT AND COMPUTE SERVICE IN JUNE



DAILY SCHEDULER ACTIVITY IN JUNE

This figure shows the activity of the batch scheduling system by day. On a typical day, the scheduler processes approximately 134819 jobs. This includes jobs that are queued, jobs that start and jobs that end. Put in another way, the scheduler manages approximately 94 jobs per minute.

NUMBER OF MAPPED HOME DIRECTORIES PER SERVER IN JUNE



TICKET ACTIVITY SUMMARY IN JUNE



Tickets Created



Tickets Updated



Tickets Resolved



Open Tickets

TICKET MESSAGE SUMMARY IN JUNE



565

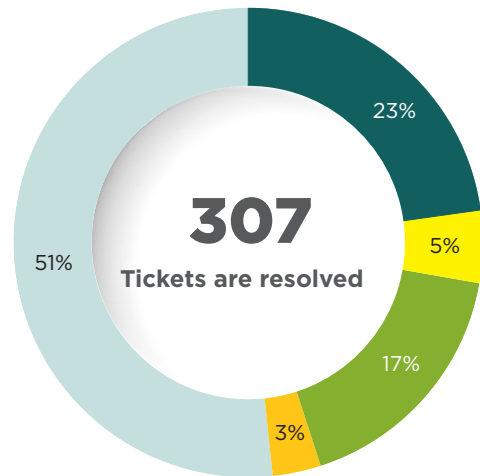
Total User's Message



752

Total iCER's Message

TICKET RESOLUTION STATISTIC IN JUNE



- Tickets resolved within 5 hours
- Tickets resolved within 5-12 hours
- Tickets resolved within 12 hours - 1 day
- Tickets resolved within 1 day - 2 day
- Tickets resolved in more than 2 days

JUNE TICKET HIGHLIGHTS



STEVEN FORD

Information Technologist

HOW TO RUN SOFTWARE CONTAINERS USING SINGULARITY



XIAOGE WANG

Research Consultant

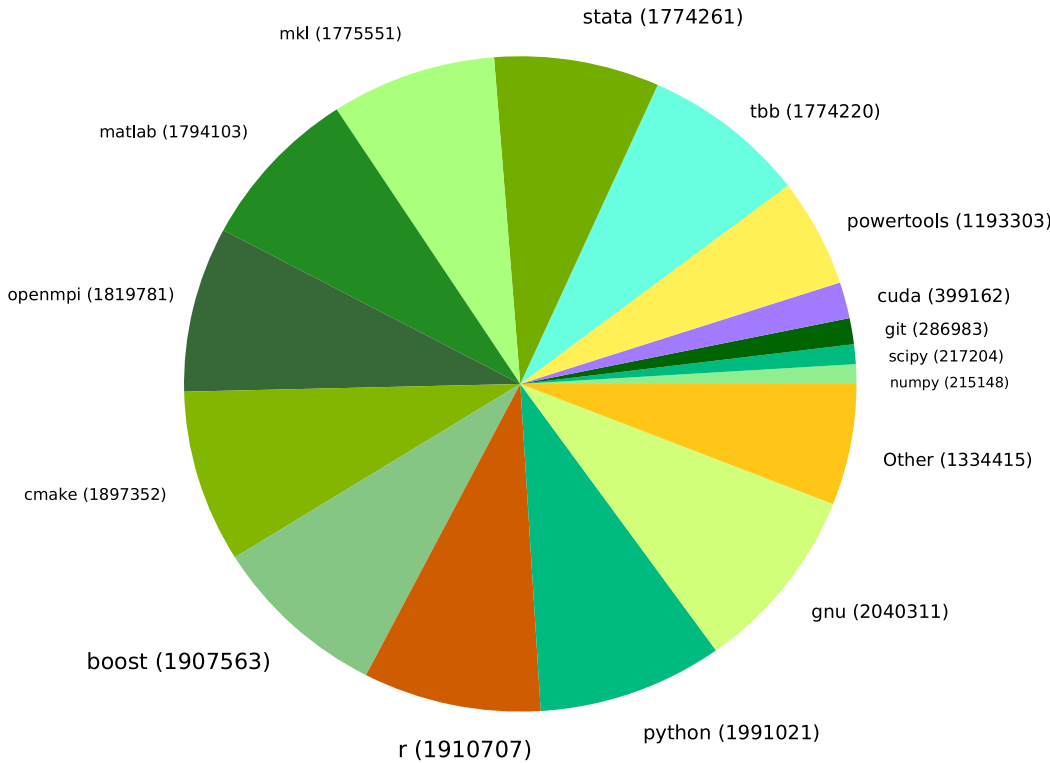
HOW TO REPORT LOGIN ISSUES

30

New User Accounts are created in JUNE

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.

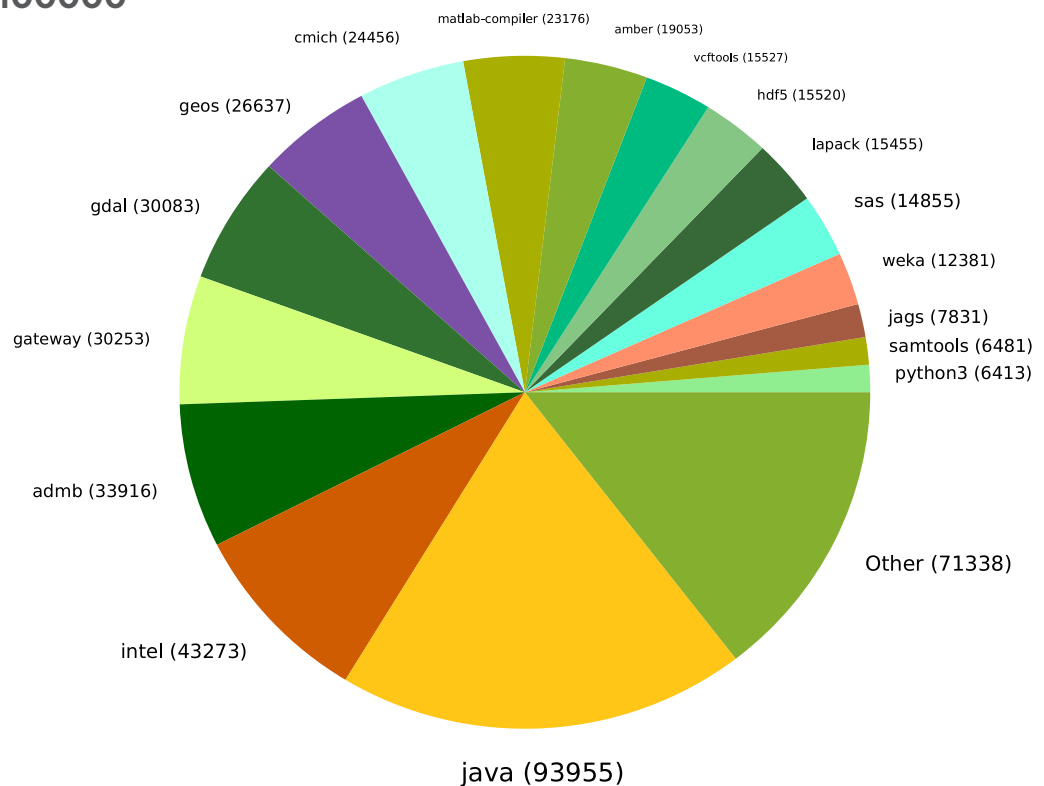
ALL MODULE LOAD COUNTS <1000000



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.

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. This group also includes the gateway module which gets loaded every time someone logs onto gateway. This by itself is interesting and shows that we had 30253 gateway connections in June. From our service report we know that 380 unique individuals used a developer node in April. This means that on average each person is logging into gateway approximately 80 times in the month or about 3 times a day (on average).



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