

iCER SERVICE REPORT

OCT 2016

iCER services were provided to **914** researchers in October

Batch Queue:

Users that run jobs on the main clusters

Developer Nodes:

Users that log into one of our developer nodes

Mapped Drives:

Users that map HPC drives to their local computer (using samba)

Tickets:

Users with active support tickets

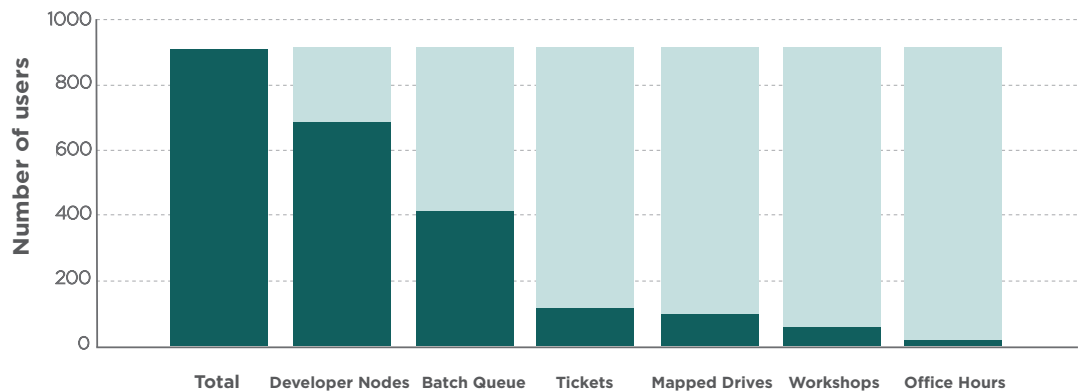
Workshops:

Users that attended iCER supported workshops

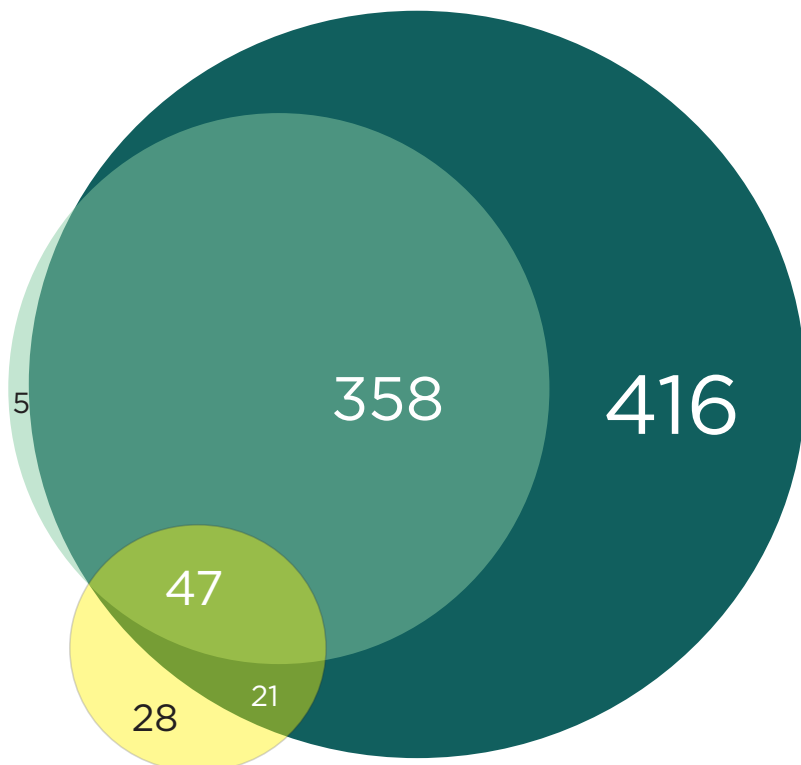
Office Hours:

Users that attended iCER open office Hours (Mondays and Thursdays 1-2pm)

NUMBER OF USERS USING iCER SERVICES IN OCTOBER



Login Nodes Batch Queue Mapped Home Drive



NUMBER OF USERS USING iCER COMPUTE SERVICES IN OCTOBER

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

363 users (358+5) are standard users that use the developer nodes to submit jobs to the queue.

Note the 5 users did not log in but still had a job that was running. This includes users that may have jobs that finished in October but never logged in or users that had jobs that submitted other jobs.

437 interactive users (416+21) 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.

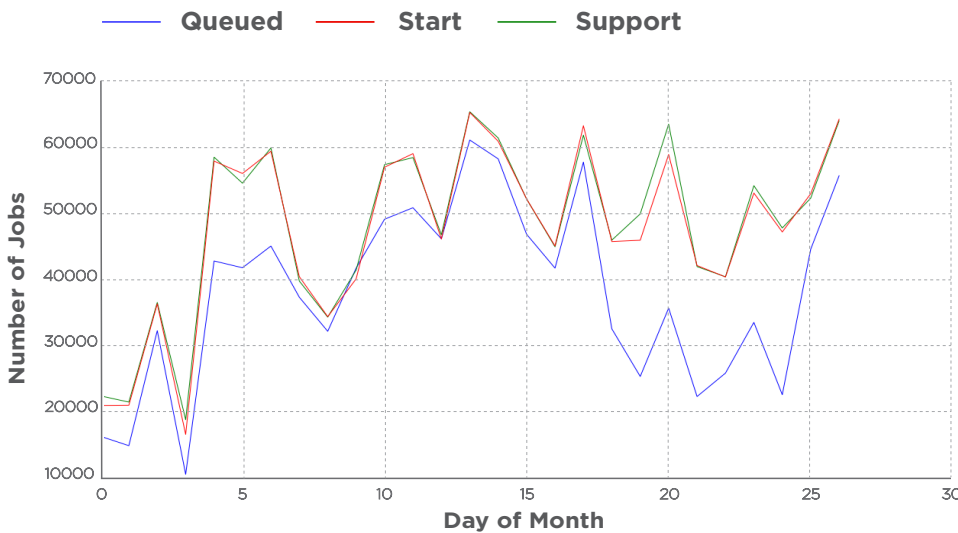
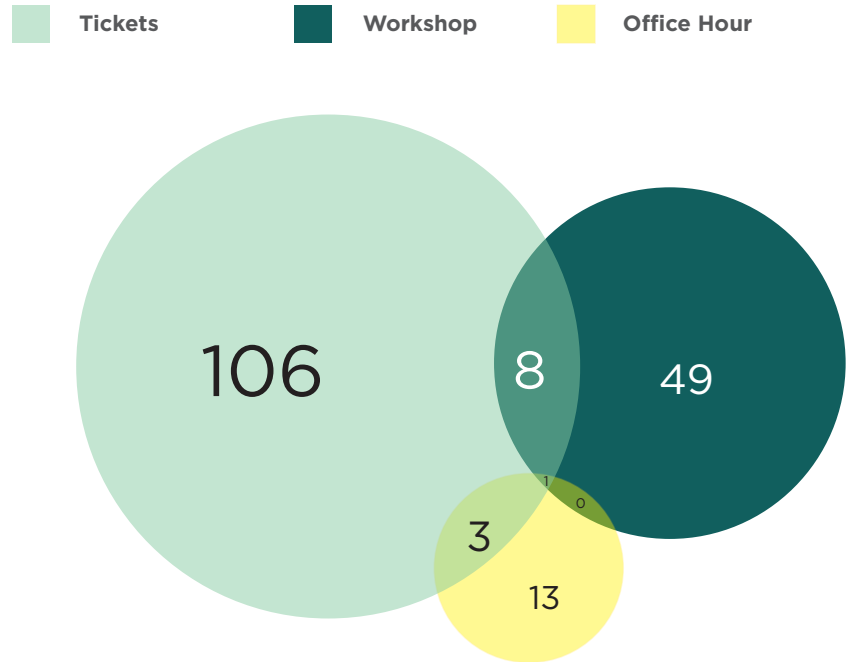
28 users used the iCER file systems to store their files.

NUMBER OF USERS USING ICER SUPPORT SERVICES IN OCTOBER

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 October:

- > Introduction to Linux/Unix
- > Optimizing and Accelerating Your MATLAB Code
- > Hands-On Introduction to Using MSU HPC
- > Advanced Topics: Running & Managing Jobs
- > Introduction to HPCC
- > Data Analysis and Visualization with MATLAB



DAILY SCHEDULER ACTIVITY IN OCTOBER

This figure shows the activity of the batch scheduling system by day. There was a maintenance outage early in the month but usage quickly scaled up. On a typical day, the scheduler processes approximately 180,000 jobs. This includes jobs that are queued, jobs that start and jobs that end. Put in another way, the scheduler manages approximately 125 jobs per minute..

NUMBER OF MAPPED HOME DIRECTORIES PER SERVER IN OCTOBER

This graph shows the number of users that mapped home directory on each of the iCER file servers.

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