

# CI Update and Welcome

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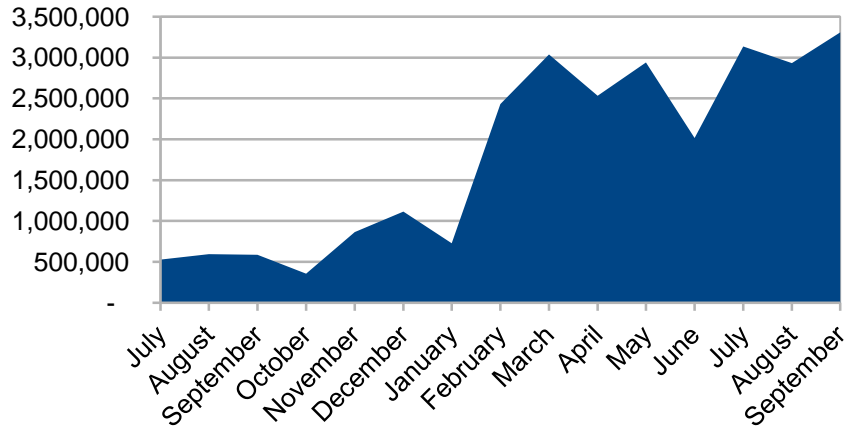


# Welcome

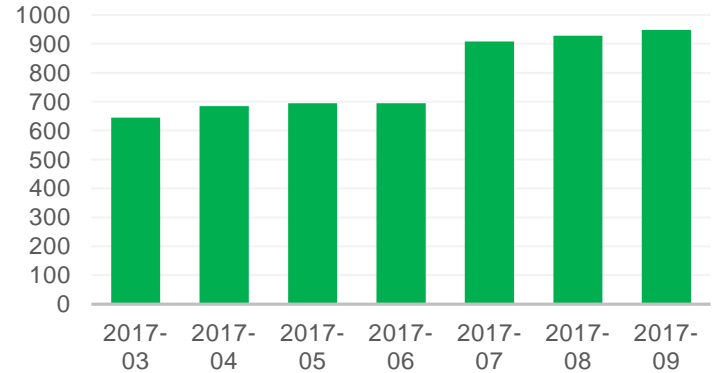
Yesterday seems like a year ago. A year ago seems like yesterday.

2017-10-04

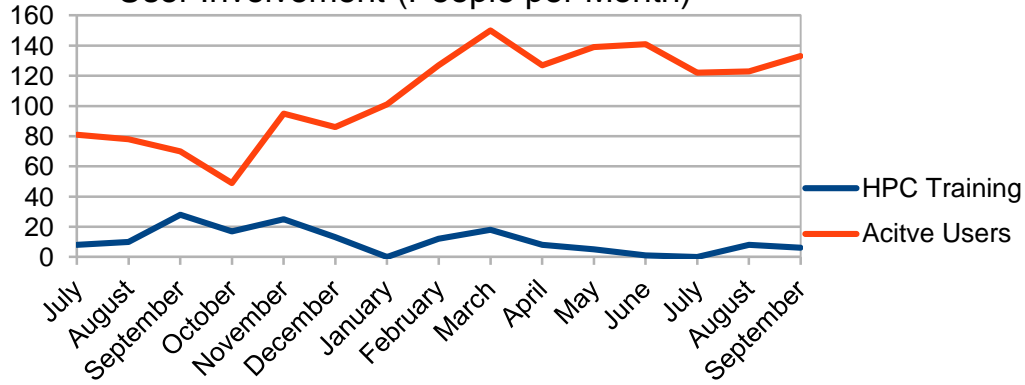
### Lewis Utilization (Core Hours per Month)



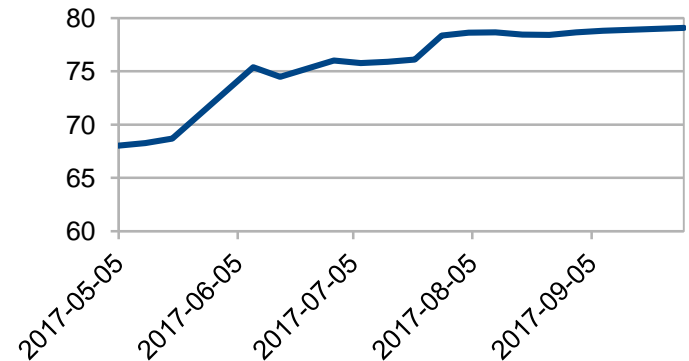
### HTC Storage (TB Allocated)



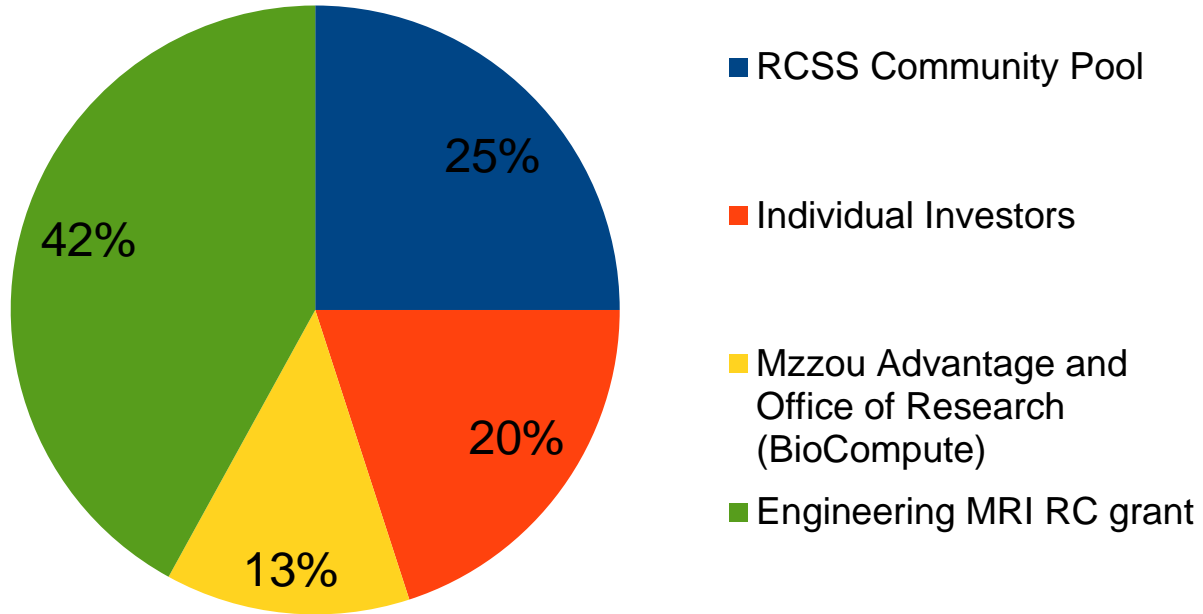
### User Involvement (People per Month)



### GPRS Utilization (TB Allocated)



# Investment in Lewis Cores





**Puppet-net**  
10.46 Head

Det Route 254

3 ACE

18 Koonz  
11 Bob  
12 Scott

10.46.1.x  
10.46.2.x

Blue  
Purple

HEAD Node  
10.10.10.6  
10.10.10.7

Det Route 254

Default Gate: 10.48.0/24

Puppet Git

6 Git Proxy / DHCP

block - 10.48.1.x  
USB Red. 10.48.20/24

100% 51.5% 75.4% 318?

1300 Disc 4

6 TOP

2-1

10.50.2.1  
10.47.2.1

116,4K

10.50.16

PNS = I  
PAB

MAC = 0.47.1x  
10.48.1x  
10.50.1.4

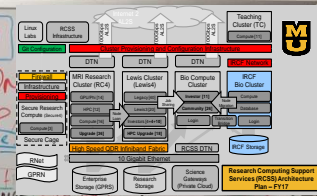
172.16 - intern  
46-00-00-00-00-00

Blue = QIP

"ACE #"

10.50.2.1 +  
10.47.2.1 +

MAC - ACE -> DNS





**Summer 2016:** Decommissioned Lewis2 (8 racks). Decommissioned 3Par/IBRIX (100TB in 2 racks). **Recommissioned 16 racks.** Upgraded provisioning infrastructure (Lewis3). **Added Jacob and Susie** (Double the team size). **Fall 2016:** **Added Teaching Cluster.** Upgrade configuration management infrastructure (Lewis4 - October). **Spring 2017:** Commissioned Secure4. **Commission new HTC Storage service with 300TB** (now 1PB). Setup HPC Storage evaluation environment (3 Racks). **Add BioCompute partition.** Migrate MRI RC GPU's to Lewis. **Migrate MRI RC partition to Lewis.** Move 100Gbps connection from Internet2 to the GPN. **Upgrade over 80 software packages.** Complete the Lewis upgrade. **Summer 2017:** Commission General Purpose Research Network service. Decommission aging RNet building switches. **Co-Developed UMKC Researcher Managed Backup.** **Fall 2017:** **Commission new Science Gateway environment (oVirt).** Full utilization (~6 months from upgrade to 5000+ cores). **Posted CI Engineer Position.** MU CI Day 2017... *and we are not slowing down.*

- + Community High Performance Computing (HPC) – No charge
- + HPC Investor [grant friendly funding, \$7600/node]
- + General Purpose Research Storage (GPRS) [\$7/TB/Month]
  - + Columbia and KC locations; DCL3 storage is available.
- + HTC Storage [\$120/TB/60Months] \*see website for details
- + **Researcher Managed Backup (rsync) in Kansas City** [\$120/TB/60Months]
- + Secure4: IRB Health data and HealthFacts [**Secure HTC storage**]
- + 100Gbps Internet2/AL2S and regional VLAN connectivity.
- + General Purpose Research Network (GPRN)
- + Teaching Cluster w/11 HPC Nodes. [tc.rnet.missouri.edu](http://tc.rnet.missouri.edu)
- + **Science Gateways (Open Beta)**
- + Grant writing consultation (letters of support, quotes, configuration)





# Cyberinfrastructure Professionals

A growing community of practice

2017-10-04