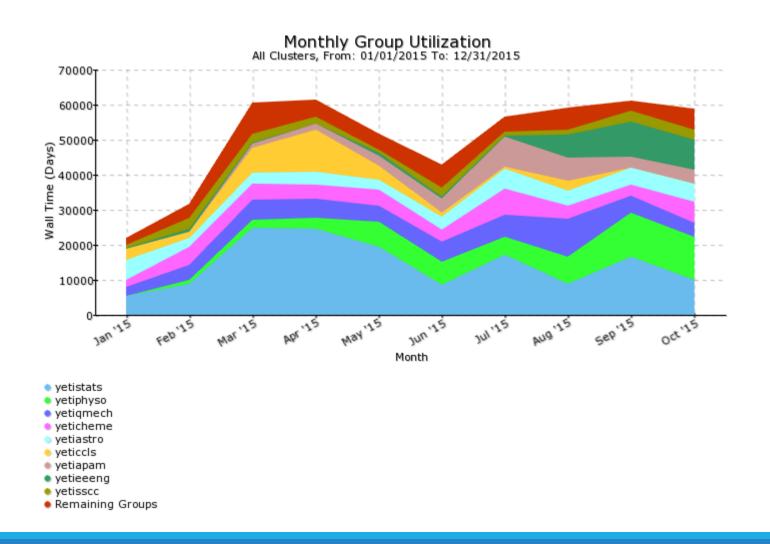
Yeti Operations Committee

NOVEMBER 5 2015 MEETING

Topics

- 1. Usage Report 2015
- 2. Major Changes
- 3. Free Tier
- 4. Education Tier
- 5. TIP (trial with intent to purchase) Tier
- 6. Publications
- 7. Queue Review
- 8. Open Discussion
- 9. Executive Session

Monthly Usage 2015



Overall Statistics 2015

Users	310
Groups	24
Total Jobs	4,519,640
Average Job Size	1.6 cores
Average Wall Time	0.1 days
Average Job Size	1.1 nodes
Average Wait Time	2.3 hours
Average Execution Time	3.2 hours

Queue Statistics 2015

Queue	Jobs	Avg. Cores	Avg. Wait (h)	Wall Time (d)	Avg. Mem (M)
batch0	1,333,373	1.6	0.7	11,187	542
batch1	2,328,561	1.3	2.5	111,071	426
batch2	316,849	2.4	1.4	69,626	2,356
batch2a*	10,300	12.7	5.2	17,474	7,667
batch3	477,063	1.3	5.8	119,640	1,067
batch4	37,479	6.6	11.9	81,979	15,903
gpu	4,885	2.1	0.1	2,300	1,359
infiniband	2,569	88.4	6.0	83,619	15,904
interactive	8,184	3.1	0.1	1,558	4,033
interlong	257	12.5	1.2	1774	2,165
long	119	4.8	48.0	860	27,631

Major Changes Since Last Meeting

- Added infiniband queue (full node only)
- Limited access to Infiniband to batch0 queue
- Added GPU queue
- Removed stack limits
- Job submission from execute nodes
- Home directory quotas*

Free Tier

- Eligibility
 - Any Columbia faculty or researcher
 - Anyone (with Columbia UNI) with faculty or researcher endorsement

Free Tier – Current Settings

Setting	Free Tier User	Renter
Fairshare (Servers)	1/64 th	1/16 th
Quota	16 GB	64 GB
Core Maximum (Soft)	4	n/a
Core Maximum (Hard)	8	512

Free Tier – Proposed Settings

- Queues restricted to batch0, batch1, and infiniband
- Two hour limit on infiniband jobs
- Core limit raised to 32:48

Education Tier

- SRCPAC Education Subcommittee
- Support for classes and workshops on Yeti
- As yet unused
- Contact hpc-support to discuss a class

Trial With Intent to Purchase

• It's back

- Access for researchers with good-faith intent to participate in next HPC purchase round
- TIP users have same global limits as regular users but a small group share

Publications

- https://wikis.cuit.columbia.edu/confluence/display /rcs/Yeti+-+Research+Products
- Will be soliciting contributions at regular intervals
- Evidence that HPC service is useful to Columbia researchers

Job Queues

Queue	Time Limit	Memory Limit	Max. User Run
Batch 0	2 hours	8 GB	512
Batch 1	12 hours	8 GB	512
Batch 2	12 hours	16 GB	128
Batch 3	5 days	16 GB	64
Batch 4	3 days	None	8
Interactive	4 hours	None	4
Infiniband	36 hours	None	10
GPU	3 days	None	4
Special Request	Varies	Varies	Varies

Open Discussion

Executive Session