



Memorial Sloan Kettering
Cancer Center

HPC user group Juno cluster

March 21 2019

Agenda

- The Juno cluster is now in production.
- New compute nodes.
- Juno polices and SLAs.
- How to run job in SLA. Non-SLA jobs.
- Why won't my job run?
- How to get help on Juno?
- Documentation wiki
- Q&A



Juno computational resources as of March 21, 2019

name	#	model	CPU	OS	cores	RAM	Interc	NVMe
jx01-20	20	Supermicro	2Xeon®2.40GHz	CentOS7	20	256	25Gb	2x2TB
ju14	1	HPEDL160G9	2Xeon®2.60GHz	CentOS6	16	256	10Gb	
jv01-04	4	HPEDL160G9	2Xeon®2.60GHz	CentOS7	16	256	10Gb	
jw02	1	HPEDL160G9	2Xeon®2.40GHz	CentOS7	16	256	10Gb	
ja01-10	10	Supermicro	2Xeon®2.30GHz	CentOS7	36	512	25Gb	2x1TB
jb01-24	24	Supermicro	2Xeon®2.30GHz	CentOS7	36	512	25Gb	2TB
jc01-02	2	Supermicro GPU 4 2080	2Xeon®2.30GHz	CentOS7	36	512	25Gb	2TB
jd01-04	4	Supermicro	2Xeon®2.30GHz	CentOS7	36	512	25Gb	2TB
Total	66				1,936			



Juno policies

- RAM in GB is per task(slot), not per job!
- All jobs must have `-W` (Walltime) and LSF will terminate the job which exceeds it
- New queue: `gpuqueue` for GPU jobs only
`bsub -q gpuqueue -sla jcSC -n 1 -gpu "num=1" ...`



SLAs

SLA name	Loan Policy	Auto Attached
CMOPI (ja*,jx* hosts)	100% resources for 90 mins 75% resources for 6 hours 40% resources for <31 days	No
DEVEL (ja*,jx* hosts)	100% resources for 90 mins 75% resources for 6 hours 40% resources for <31 days	No
jvSC	100% resources for 6 hours	Yes
jdSC	100% resources for 6 hours	Yes
jbSC	100% resources for 6 hours	Yes
jcSC	100% resources for 6 hours	No

Auto Attached Yes: job will be attached to SLA. No request for SLA needed

Auto Attached No: job has to request SLA “ bsub –sla CMOPI “
“bsla“ shows existing SLAs

“bugroup” checks the mapping UID to LSF groups



Why won't my job run?

- Check status of my job using JobID (JID)
 - #1: `bjobs -l JID`
 - Why can't my job run now? Check "PENDING REASONS" in the output #1
 - When will my job start to run? Check "ESTIMATION" in the output #1
 - #2: `bjobs -uall -p`
 - Will show all jobs in PEND state
- Why did my job exit abnormally?
 - `bhist -l JID`
 - `bhist -n 0 -l JID`



How to get help on Luna/Juno

- Please, send email to: hpc-request@cbio.mskcc.org
- All information on how to contact us:
<http://hpc.mskcc.org/contact-us/>



Documentation wiki

- <http://mskcchpc.org/display/CLUS/Juno+Cluster+Guide>
- <http://hpc.mskcc.org/compute-accounts/>





Questions/Answers

