

Slurm Roadmap



Danny Auble
SchedMD LLC

Slurm User Group Meeting 2016



- Support for ≥ 2 TB memory per node.
 - If you have custom plugins, make sure to convert all memory variables to `uint64_t` from `uint32_t`.
- New MailDomain setting to qualify usernames.
 - Avoid MTA configuration issues on controller.
- Federation
 - Scheduled to be fully complete by May 2017 (Slurm 17.11)



- Remove AIX support.
 - Lots of additional code cleanup.
 - Code base moving towards C99 and POSIX1.2008 compliance.
- New sacctmgr commands:
 - "shutdown": shutdown slurmdbd
 - "list stats": get slurmdbd statistics - "sdiag for slurmdbd"
 - "clear stats": clear slurmdbd statistics.

17.02

- New salloc/sbatch/srun “--spread-job” option to distribute tasks over as many nodes as possible.
 - Treats the --ntasks-per-node option as a maximum value.
- New “AdminComment” field.
 - Like “Comment”, but only modifiable by admins.
 - Can use through a job_submit plugin to store additional details in DB.

17.02

- The database index for jobs is now 64-bits, was 32-bits before.
- If you happen to be close to 4 billion jobs in your database, you will want to update your slurmd at the same time as your slurmdbd to prevent roll over of this variable.

17.02 - Warnings



- **The database schema has changed. Updating slurmdbd will take time. No records will be lost while upgrading, but the slurmdbd may not be responsive. It will not be possible to automatically revert the database to an earlier version of Slurm**
- The max MaxJobID is now 67,108,863. Any pre-existing jobs will continue to run but new job ids will be within the new MaxJobID range. Adjust your configured MaxJobID value as needed to eliminate any confusion.
- Every plugin except SPANK must be built against the same version of Slurm (major and minor version number) to be loaded

Infinity and Beyond



- Retirement of Cray / ALPS support.
 - Native Cray offers significant advantages and access to new functionality.
- Retirement of sched/wiki and sched/wiki2 interfaces.
- BlueGene/L + P retirement.
 - Anyone know of any active BG/P systems?
- BlueGene/Q retirement.
 - Last supported release likely ~ 17.11 or 18.08.