SLURM

SLURM User Group Meeting
23-34 September 2014
Topics

- SLURM Experience on Cray XE/XK/XC
- Cray Input to SLURM Roadmap
- CCM
SLURM Experience on Cray XE/XK/XC

● SLURM w/ALPS
  ● CSCS
  ● Canadian Govt
  ● CSC Finland
  ● Hong Kong Sanatorium & Hospital
  ● iVEC/Pawsey
  ● KTH Royal Institute of Technology
  ● NOAA
  ● NVIDIA
  ● Tokyo Institute of Technology
  ● TOTAL E&P Research & Technology USA, LLC.

● Native SLURM
  ● US Govt
Cray SLURM Strategy

● Over and above everything else, customers running Native SLURM will be on the SLURM community feature roadmap.
  ● Customers will get the features planned and developed by SchedMD and community developers

● Cray does not have plans to add enhancements to SLURM (beyond those that Cray has been contracted by a Cray customer to develop)
  ● To do so would put Cray at odds with our WLM partners
Cray Input to SLURM Roadmap

● **Power Aware Scheduling**
  - point in time power at blade and cabinet
  - Job/app data
  - System level power capping
  - Power information available to application on compute nodes
  - SEDC – voltage, current, temp, fan speed - rate of once per min
  - P-state job launch and reservation time (jobs run at fixed p-state by performance governor)

● **PM features in development**
  - Power monitoring and mgmt API (capmc)
  - Api for monitoring and control from service nodes
  - Node power on/off
  - Node level power capping
  - Unified Power Mgmt DB and SEDC including tools for access
  - Move PMDB off of smw.
CCM now and future

● Now
  ● Cray working on integrating CCM scripts into the community.

● Future
  ● Redesign of CCM.
Thank you!