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
  - Unifted 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.

SUG

- **Thank you!**