Cloud and Stuff

Brian Christiansen
SchedMD

Slurm User Group Meeting 2020

Agenda

All times are US Mountain Daylight (UTC-6)

Time	Speaker	Title
9:00 - 9:50	Jason Booth	[Field Notes 4: From The Frontlines of Slurm Support](#)
10:00 - 10:25	Brian Christiansen	[Cloud and Stuff](#)
10:30 - 10:50	Nate Rini	[REST API](#)
11:00 - 11:50	Tim Wickberg	[Slurm 20.11 and Beyond, Open Q+A](#)

Welcome

- Four separate presentations, four separate streams
- Presentations will remain available for one week after SLUG'20 concludes
- Presentations are available through the SchedMD Slurm YouTube channel
  - https://youtube.com/c/schedmdslurm
- Or through direct links from the agenda
  - https://slurm.schedmd.com/slurm_ug_agenda.html

Asking questions

- Feel free to ask questions throughout through YouTube's chat
- Chat is moderated by SchedMD
- Questions will be relayed to the presenter by the moderators
  - Some may be deferred to the end if they cannot be relayed in a timely fashion
- Note there is a ~5 second broadcast delay
  - By the time you've asked your question, the presenter may have moved ahead to a different topic, and may defer the question until the end

Cloud and Stuff

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- Slurm+GCP V4
- Slurm 20.11 Improvements

Slurm+GCP V4 (February 2021)

- Terraform GA
  - Retire deployment manager
- Pre-made images
  - Quick start times
- Placement Policies
  - Instances located closer to each other and in the same network infrastructure
- TPU Support
  - Schedule Cloud TPUs (Tensor Processing Unit)
- Bulk API Integration
  - Faster creation of large numbers of instances
  - Regional capacity finding
- Marketplace
  - Simple cluster creation

Slurm 20.11 Improvements

- Dynamic FUTURE registrations
  - slurmd -F [<feature>]
  - Associates available FUTURE node with slurmd
  - Automatic nodeaddr and hostname registration
  - Alias propagation
  - FUTURE state remembered
- Automatic CLOUD hostname and addr registration
  - SlurmctldParameters=cloud_reg_addrs
  - NodeAddr and NodeHostName reset after powering down
- Configurable Resume/Suspend interval
  - SlurmctldParameters=
  - power_save_interval=# Default is 10 seconds
  - power_save_min_interval=# Default is 0

Questions?

Next Session

- The next presentation is by Nate Rini with "REST API"
- Starts at 10:30am Mountain Daylight Time (UTC-6)
- And is on a separate YouTube Live stream
- Please see the SchedMD Slurm YouTube channel for links

End Of Stream

- Thanks for watching!