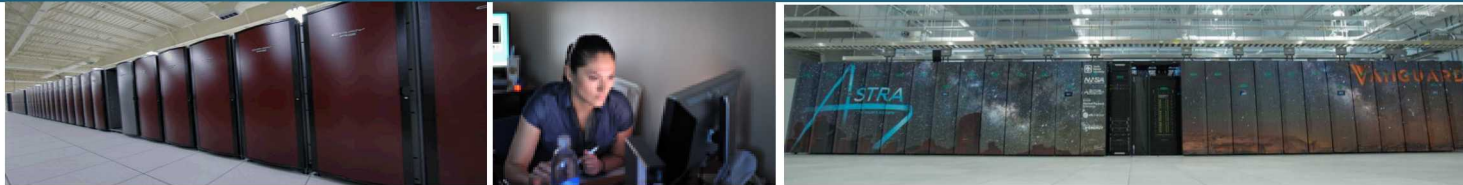


This paper describes objective technical results and analysis. Any subjective views or opinions that might be expressed in the paper do not necessarily represent the views of the U.S. Department of Energy or the United States Government.

Live Poll: <https://tinyurl.com/sc19bof>

SAND2019-14093C

# SCI9 BOF: Containers in HPC

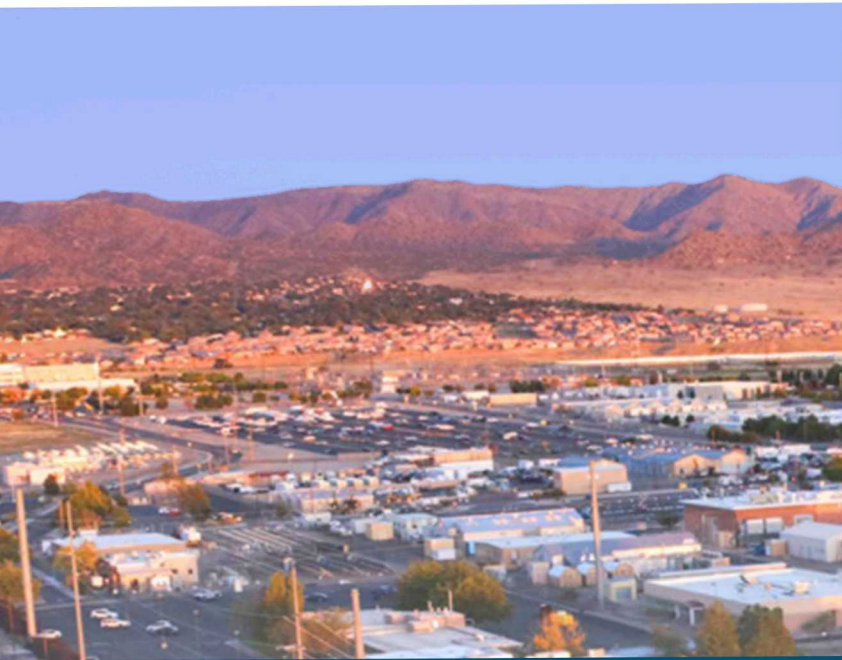


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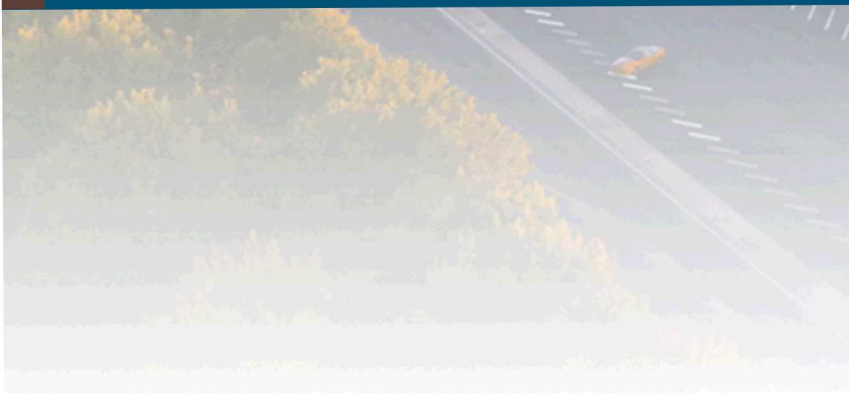
Sandia National Laboratories is a multimission laboratory managed and operated by National Technology & Engineering Solutions of Sandia, LLC, a wholly owned subsidiary of Honeywell International Inc., for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-NA0003525.

Live Poll <https://tinyurl.com/sc19bof>





# Lightning Talks – Container Experts



Live Poll: <https://tinyurl.com/scI9bof>

Shane





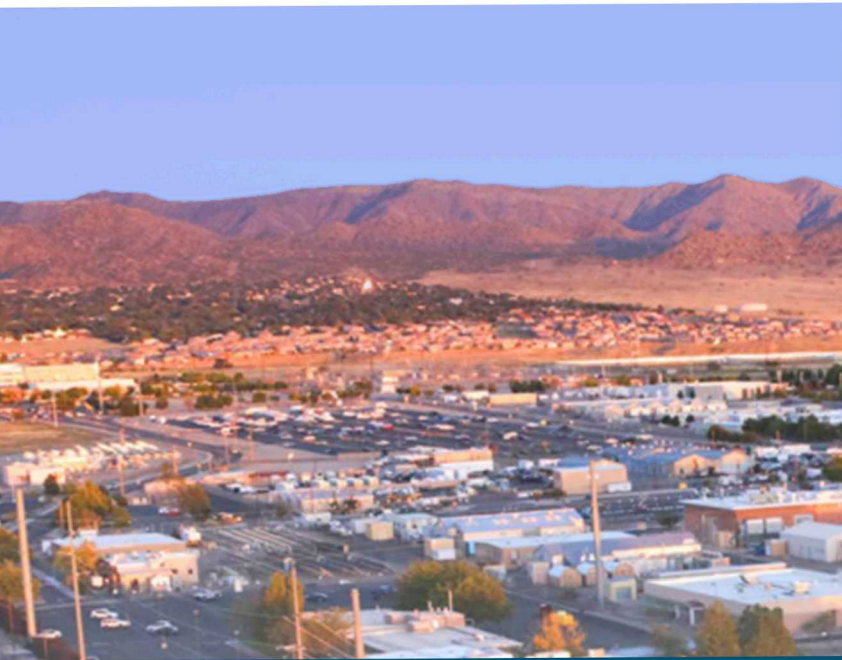




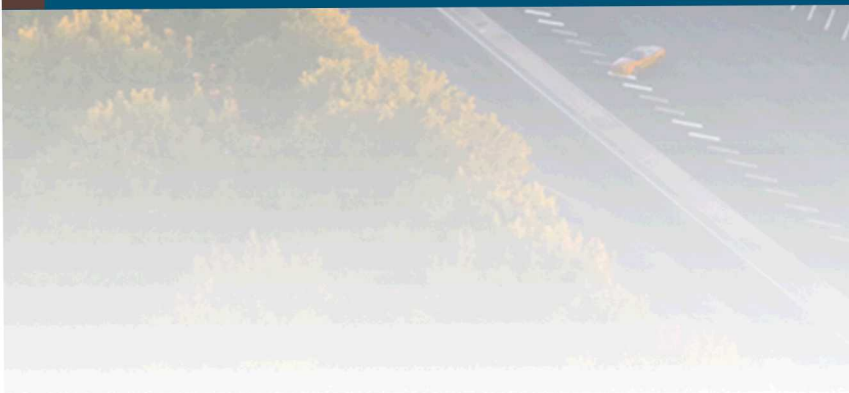
Vanessa



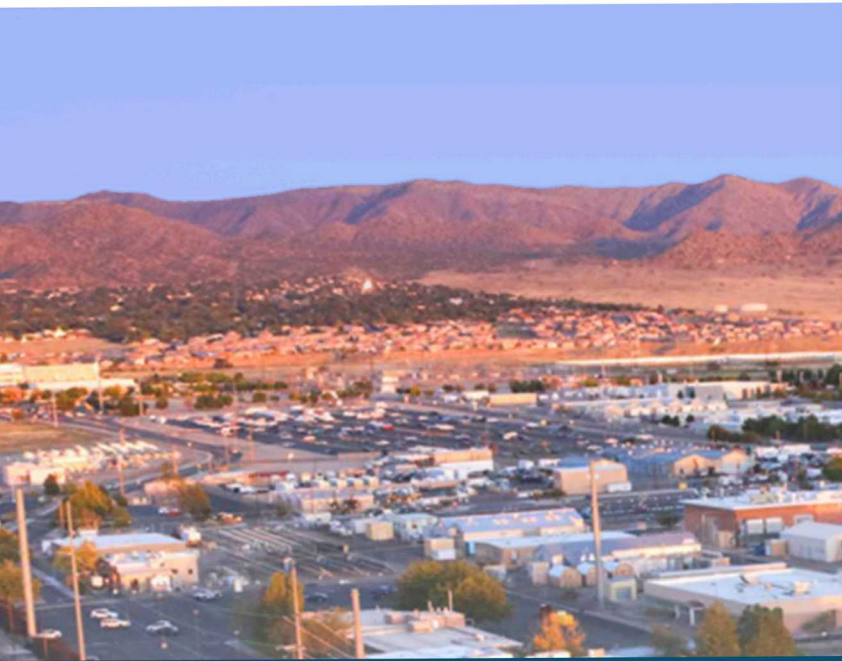




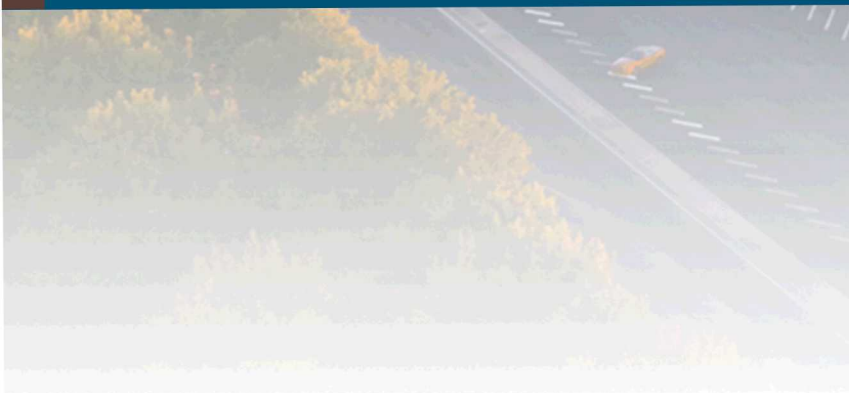
## Live Polling Results



Live Poll: <https://tinyurl.com/scI9bof>



## Panel Session



Live Poll: <https://tinyurl.com/sc19bof>

## Panelists

- Shane Canon – NERSC/LBNL
- Reid Friedhorsky – LANL
- CJ Newburn – NVIDIA
- Bill Sparks – Cray

# Question #1: Container Best Practices

- What are some best practices that users and facilities can invoke to ensure consistent usage and performance portability with HPC containers?



## Question #2. Security

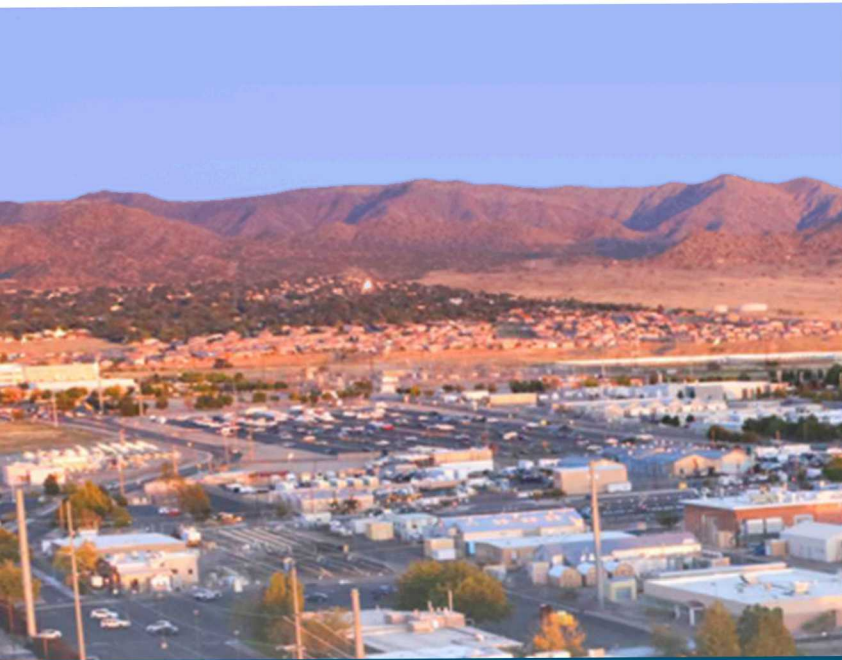
- What are the key security considerations when using containers in production HPC facilities?

## Question #3: Container Services

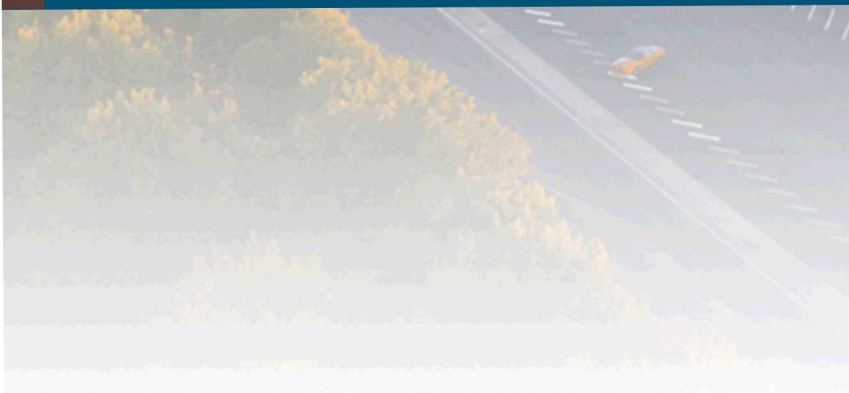
- Should HPC facilities embrace or support service-based container orchestration frameworks?(eg: Kubernetes, OpenShift, Docker Swarm, etc)
- If so, what challenges exist in integrating orchestration services with traditional HPC batch schedulers?

## Question #4: Exascale and Beyond

- What are some of the biggest changes or advances still to come with containers at Exascale?
- What are emerging challenges for containers especially in an HPC context?



## Live Poll Results (again)



Live Poll: <https://tinyurl.com/scI9bof>