GRACC
New Generation of the OSG Accounting

Poster ID 504
CHEP 2016
San Francisco

Kevin Retzke — *kretzke@fnal.gov,* **Tanya Levshina** — *tlevshin@fnal.gov,* **Bo Jayatilaka** — *boj@fnal.gov,*
Chander Sehgal — *sehgal@fnal.gov,* **Shreyas Bhat** — *sbhat@fnal.gov* • Computing Sector, Fermilab, Batavia, IL
Brian Bockelman — *bbockelman@cse.unl.edu,* Derek Weitzel — *dweitzel@cse.unl.edu* • University of Nebraska — Lincoln
Robert Quick — *rquick@iu.edu* • Indiana University **Frank Wuerthwein**— *fkw@ucsd.edu* • University of California — San Diego

Outline

- The motivations for replacing Gratia, the current OSG Accounting System
- Architecture of a new next-generation accounting service, GRACC:
  - based on open-source technology
  - compatible with Gratia
- Requirements include:
  - preservation of old data
  - addition of new metrics
  - aggregation at various levels
- GRACC consists of swappable, independent components:
  - Elasticsearch
  - Logstash
  - Kibana
  - Grafana
  - RabbitMQ
  - Custom probes

Outline

- Distributed deployment:
  - ES cluster at Nebraska
  - RabbitMQ at Indiana
  - GRACC Collector at Fermilab
  - Probes are running on all OSG sites
- ES Statistics:
  - 1.1 billion documents in ElasticSearch
  - 1 million new job records per day
- Examples of Grafana Dashboards:
  - Bargraph: Payload wall duration per Field of Science
  - PieChart: Payload wall duration per VO
- Planned Development
  - Integration with WLCG and XSEDE Accounting
  - Full integration with the OSG Information Management Service
  - Production: Spring of 2017.