HPC | User Portal

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User Support Group

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Support – Systems meeting
Introduction

• It is crucial for HPC to control the jobs’ behavior.
• Command-line solutions are enough to have fast feedback.
• But as the amount of jobs grows, or a deeper analysis is needed, a monitoring tool is desirable.
• We have decided to develop a common framework to collect, process and show all the job-related information in a public portal.
• Developed upon Slurm: we trust the information given.
• MN4, PW9, KNL, and MT (some others soon).
• userportal.bsc.es is the web, and there is a backend infrastructure.
User Portal main data flow

- MN4 head
  - Slurm SRV
  - Load SRV

- CTE-P9 head
  - Slurm SRV
  - Load SRV

- CTE-KNL head
  - Slurm SRV
  - Load SRV

- MT head
  - Slurm SRV
  - Load SRV

Main storage

- Gather SRV
  - SQL
  - Influx

- HPC User Portal
  - Backend

Frontend
There is 3 main roles: user, group leader, and operator.

- User and leader are just read-only.
- Group leaders can see all the group info on who they are leaders.
- OPs can see everything, and have additional features.
User Portal Web.

• Main sections:
  • Front page (job list), jobs’ preview, and jobs’ pages
  • Account view sharing.
  • CPU accounting.
  • Maintenance.
  • Machines’ stats.
• Admin:
  • Monitoring.
  • Job notifications.
  • Machines’ management.

• Let’s have a look: userportal.bsc.es.
Thank you

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