



# HEPscore Accounting Workflow Integration

## APEL and Python 3/EL8+

*WLCG Ops 01/02/2024*

# Overview

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- APEL and Python 3/EL8+

# HEPscore23 accounting workflow integration

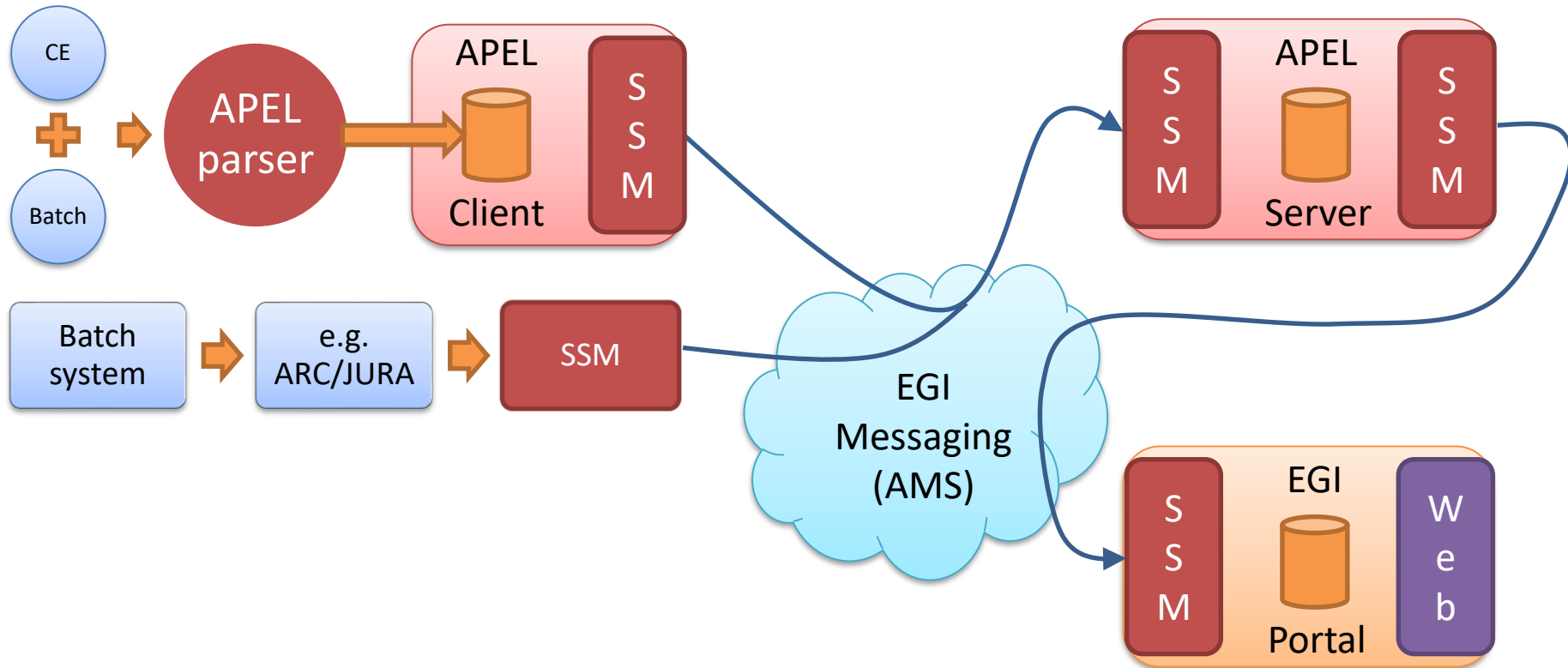
# Recap

- Supporting the HEPscore23 benchmark through the whole accounting data pipeline, and enabling a transition from HEPSPEC
- See also our talk at the September GDB:  
<https://indico.cern.ch/event/1225116/#2-hepscore-benchmark-status>

# Components involved

- EGI Accounting Repository/APEL Repository
  - Database - schema changes required for extra fields and summarising procedures
  - APEL server software – to handle new message/record format and load/unload from database
- EGI Accounting Portal
  - Web UI – to select and display extra record field
  - Local database (using APEL schema)
  - APEL server software – provided by APEL team
- APEL Client

# Diagram



# Completed tasks

- APEL Software changes
  - Message handling
  - Parsing/loading process
  - Summarising process
  - Unloading process
  - APEL client – basic HEPscore publishing in old record format
- Database
  - Schema definitions changed and deployed in test environment (adds extra fields and alters summarising stored procedures)
- Some testing completed between site, Repository and Portal
  - Records from a few test sites
  - Selection of recent production data
- Portal web UI updated in staging
  - See other presentation in session:  
<https://indico.cern.ch/event/1376343/#1-hepscore-integration-in-the>

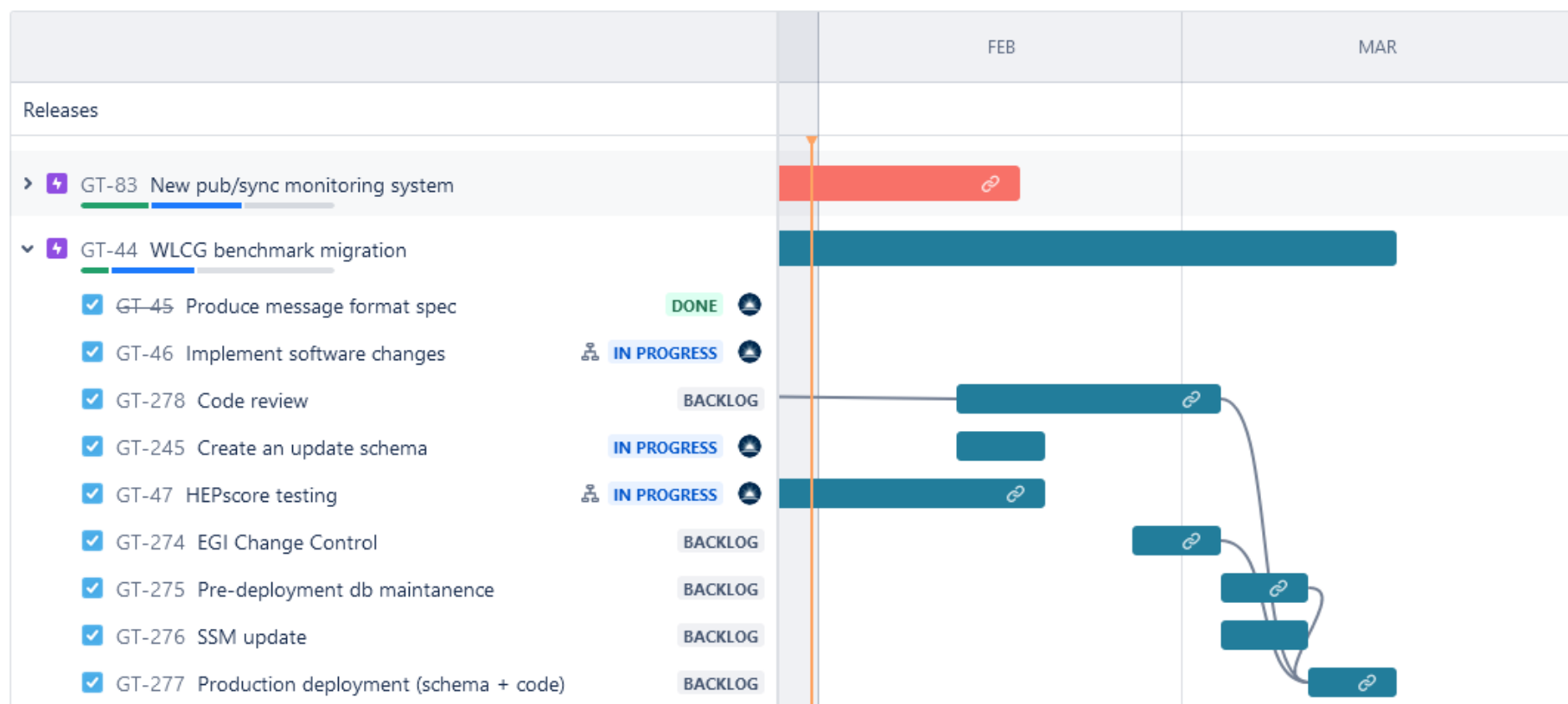
# To Do

- Test sending of old format normalised records to new APEL server software at Portal
- Create an update schema to apply to Repository database during rollout
- Code review
- Final build of package
- EGI Change Control
- Pre-deployment database maintenance (plus SSM update)
- Production Portal rollout
  - Brief downtime
- Production Repository rollout
  - Downtime on the order of 2 days
  - Database update
  - APEL server update
  - Verify configuration before ending downtime



# Timeline

- Blocker: Urgent replacement of pub/sync system
- Allowing for that, aiming for mid-March deployment



# APEL and Python 3/ EL8+

# APEL and Python 3/ EL8+

- SSM build tooling currently being updated for EL8+ and Python 3
- APEL compatibility follows on from this
  - Required for Repository hosts too
  - Changes to be merged after new benchmark support
  - Current plan aims for packages ready by end of March
- EGI will follow up with UMD to check progress of UMD-5 repository

# Questions?