TAP: Provide interface to Qserv query-status information

Target release	DP0.2
Epic	
Document status	DRAFT
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Developers	
Dependencies	Capability already in Qserv
Notes	CHB to propose an architecture for doing async queries

Goals

- For async queries, which may be long-running, the TAP service should act as a proxy for the Qserv query status information.

Background and strategic fit

This is responsive to requirements and design that touch on informing users about the scale and expected performance of their queries.

The UWS job-status XML schema provides an unstructured element which can be used to deliver system-specific job status information to users. The TAP service would access this information in Qserv and pass it through to the user. The Portal Aspect and Pyvo provide means for users to view this sort of status information.

Current status:

- Qserv provides an interface for returning query status for a query running in "disconnected" mode (which the Rubin TAP service doesn't use). A `SHOW PROCESS LIST` command is supported in the Qserv SQL interface. More detailed queries to the "qinfo" table can be done to obtain additional information; this allows querying by disconnected job ID. Some information on completed queries is available as well.
    - Information available currently:
- Rubin TAP doesn't use disconnected queries, so it would find it awkward to attempt to use this interface, though not impossible (it could try to match up queries heuristically).

Assumptions

Requirements

#	Title	User Story	Importance	Notes
1				
2				

User interaction and design

Questions

Below is a list of questions to be addressed as a result of this requirements document:

Question	Outcome

Not Doing