

UWS 1.1

Proposed Changes (cont)

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Recapitulation

- ✦ At Madrid interop there was a productive discussion which led to a new WD being published
 - ✦ allow job list to be filtered on PHASE
 - ✦ add new PHASE “ARCHIVED”
 - ✦ Blocking behaviour
- ✦ Some discussion on mailing list after recent WD publication

Job List Filters

- Alternative solution to the “paging problem” i.e. too many results in the list
- Paging considered too great a change for 1.1
- Filtering the job list chosen i.e. ?PHASE=COMPLETED to show only the completed jobs
- Could add more filter possibilities - aim for a small list with the most recent jobs -e.g.
 - ?AFTER=2014-09-10T10:01:02 list jobs that have been started after the given time
 - ?LAST=100 list only the latest 100 jobs started.

Blocking

- ✦ Discussion at and shortly after last interop introduced the idea of blocking - the server does not reply immediately to allow the client to poll for status less often
 - ✦ blocking should not be too long - otherwise left with problem of network timeouts!
- ✦ Idea from Dave Morris to use `/jobs/{jobid}?WAIT=20` to request server to block for given number of seconds.
 - ✦ server allowed to return as soon as it thinks something has happened, but must return when there is a change of PHASE.

Blocking - race condition

- Mark Taylor pointed out this race condition which prevents monitoring intermediate PHASES
 1. Client requests status from server
 2. Server returns status: it's QUEUED
 3. Server changes status to EXECUTING
 4. Client makes blocking call to server to find out when status changes
 5. ... wait ...
 6. Server changes status to COMPLETED
 7. Blocking call returns, client finds out that status is COMPLETED
- need to ensure that the client knows the PHASE when blocking starts
 - proposed solution add ?PHASE= to the request so that the server will only block if the PHASE is as specified

Schema Changes

- Desire to have some more metadata associated with <result>
 - size
 - mime-type
- and possibly some more custom attributes
 - `<xs:anyAttribute namespace="urn:uwscustom" processContents="lax" />`
- Updated the schema to include these so that there is a version 1.1 of the schema
 - issues about how old clients might react to new UWS 1.1 responses - probably mostly OK in practice as all of the new things are additions.

Next Steps

- New WD
 - Solution for race condition
 - Schema changes
 - more filters
- Need some implementations if this is to move to PR
- latest unofficial working draft on volute
 - <http://volute.googlecode.com/svn/trunk/projects/grid/uws/doc/UWS.html>