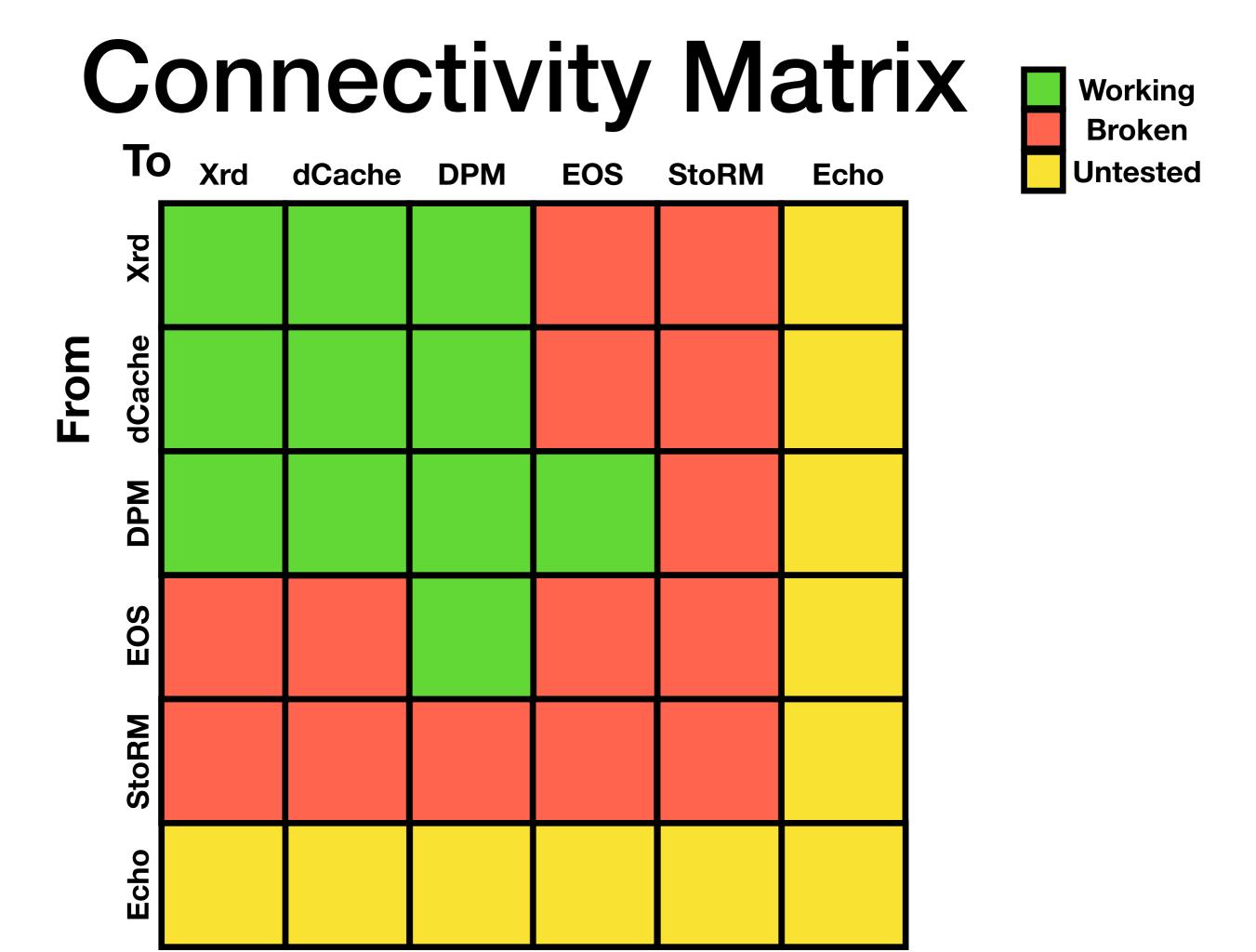# HTTP Update

WLCG DOMA / TPC
Brian Bockelman, 12 September 2018

Quick Update

- Goals from last time:

  - Re-run all the connectivity matrix tests against fts3-devel. **DONE**

  - 4 PhEDEx links upgraded. **PARTIAL**. 2 done, 2 in progress.

  - Scale testing waiting for Rucio testing instance. Thomas and Andrea have started to move files via this instance, but not yet to scale test status. **Updates?**

- Again, significant stress tests on XrdHttp (and corresponding patches).

  - Nebraska moved about 1PB using XrdHttp at very high levels of concurrency (up to 60Gbps at peaks).

  - Nebraska's stageout from worker nodes switched from GridFTP to HTTPS.

- Investigated EOS issues (as EOS -> dCache *should* work but doesn't). Appears to be due to lingering DNS issues (eosppshttp01.cern.ch redirects to eosppshttp.cern.ch; the latter doesn't exist.

- SToRM: When POST for macaroon is performed, returns entire file instead of (expected) error. Might actually work for some cases, but testing is tedious when a 4GB "macaroon" is returned..

  - Seems to just be an incorrect HTTP response, probably easy to work around.

- Echo: Test endpoint not yet available.

Connectivity Matrix

From \ To	Xrd	dCache	DPM	EOS	StoRM	Echo
Xrd	Working	Working	Working	Broken	Broken	Untested
dCache	Working	Working	Working	Broken	Broken	Untested
DPM	Working	Working	Working	Working	Broken	Untested
EOS	Broken	Broken	Working	Broken	Broken	Untested
StoRM	Broken	Broken	Broken	Broken	Broken	Untested
Echo	Untested	Untested	Untested	Untested	Untested	Untested

Legend: Working (green), Broken (red), Untested (yellow)

Known Issues

- Removed all items that have been fixed for more than one month.

- DAVIX: All open issues fixed in 0.6.9 (unreleased?)

- gfal2: All open issues fixed in 2.16.0 (unreleased?)

- DPM: No pressing issues?

- dCache:

    - Macaroon does not work with COPY unless its path points to parent directory. dCache RT#9468. **Workaround in FTS3 PR #18**.

    - **Does not recognize "davs" as a valid scheme.** dCache RT#9473 and DMC-1070**.**

- Xrootd:

    - Several stability and protocol compliance. Since last report - PR#819, #816, #822, #814, #812

    - Particularly, Xrootd 4.9.0 will support checksums over HTTPS.

- EOS: Integration with XrdHttp in-progress. **Any updates today?**

- **StoRM**: TPC implementation in-progress. Passive support seems fine; X509-only. **Any updates today?**

26 Sept Goals

- 4 PhEDEx links upgraded.

- "10TB scale test"

- Get StoRM working for "passive" part of transfer.

- Echo endpoint for testing.

- Progress report from EOS team (their goal was test endpoint ready by early October).