

Conditions tag coordination

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Reprocessing Tags

TAG			
REPPST-007			<input checked="" type="checkbox"/> Show/Hide
August 29	COMCOND-REPPST-007-00 Copy of COMCOND-REPPST-006-02 with new btagging calibration		<input type="checkbox"/>
September 22	COMCOND-REPPST-007-01 Autumn 2010 reprocessing, first validation with 16.0.0.Y, fields on		<input type="checkbox"/>
September 25 OFLCOND-SDR-BS7T-04-00	COMCOND-REPPST-007-02 Autumn 2010 reprocessing, second validation with 16.0.1.Y, fields on		<input type="checkbox"/>
October 2	COMCOND-REPPST-007-03 COMCOND-REPPST-007-02 + IndetBeampos-ES1-UPD2 (Tier0 beamspot)		<input type="checkbox"/>
October 4 OFLCOND-SDR-BS7T-04-01	COMCOND-REPPST-007-04 Express Stream processing with 16.0.1.Y, COMCOND-REPPST-007-02 + updated ID alignment, fields on		<input type="checkbox"/> ES
October 20 OFLCOND-SDR-BS7T-04-02	COMCOND-REPPST-007-05 Bulk processing with 16.0.2.Y, COMCOND-REPPST-007-04 + updated beamspot and b-tagging, fields on		<input type="checkbox"/> BULK
November 5	COMCOND-REPPST-007-06 Clone of COMCOND-REPPST-007-04 for the Autumn Reprocessing Part II (October 2010 runs), fields on		<input type="checkbox"/> ES
November 16	COMCOND-REPPST-007-07 Clone of COMCOND-REPPST-007-06 with beamspot, MDT, Pixel and LAr updates, fields on		<input type="checkbox"/> BULK

Many tags, some avoidable

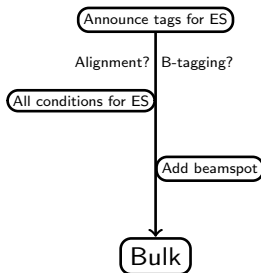
Advertized too early

For beamspot tests, conddb override in **post-exec**

Phase I

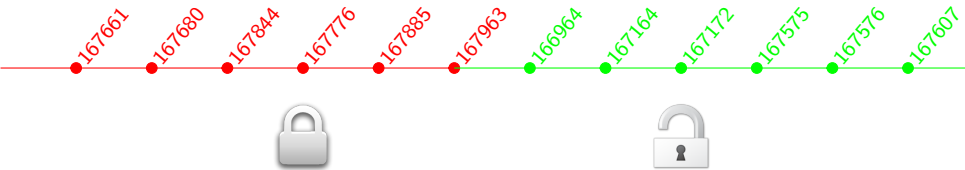
Phase II

All the milestones were not really known initially



About Closed IOVs

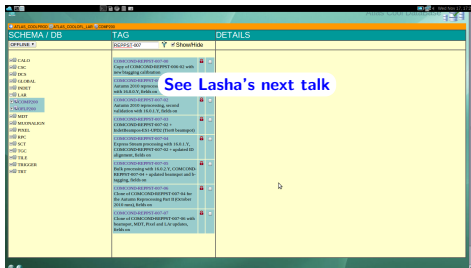
- Purpose: mechanism to guarantee backward compatibility of tags
- Did it work? Would say yes in general
- Tag changes are easily spotted
- Caveat 1: not robust since only one mistake in the updates
 - ⇒ New global tags needed!
 - ⇒ Tools to be improved in order to avoid mistakes with uploads
- Caveat 2: backward compatibility could not be insured for all global tags
 - ✓ yes in between bulk or ES tags: 07 → 05 or 06 → 04
 - ✗ no from bulk → ES tags: 07 → 06 or 05 → 04
- Having parallel tags seems a good strategy for *slow* reprocessing
 - ⇒ offers a built-in 2nd chance



Lessons

- 1 We should not assume that systems know what is coming
 - pre-announcements warning the systems about what is coming
 - and ask if they expect to have conditions requests
- 2 Is one iteration enough? E.g. spotting all the problems for LAr in one iteration was a difficult task
⇒ parallel tags as a default
- 3 Some systems have very complex schema
⇒ we should make an effort asap to simplify things and make our lives easier in the future
- 4 More about management:
 - Systems should not jump on an unlocked global tag unless being specifically told should not advertize them in the first place if it's not needed
 - Experts who have just finished their job in the critical path should be asked to remain available (until it's all ok)

New tools

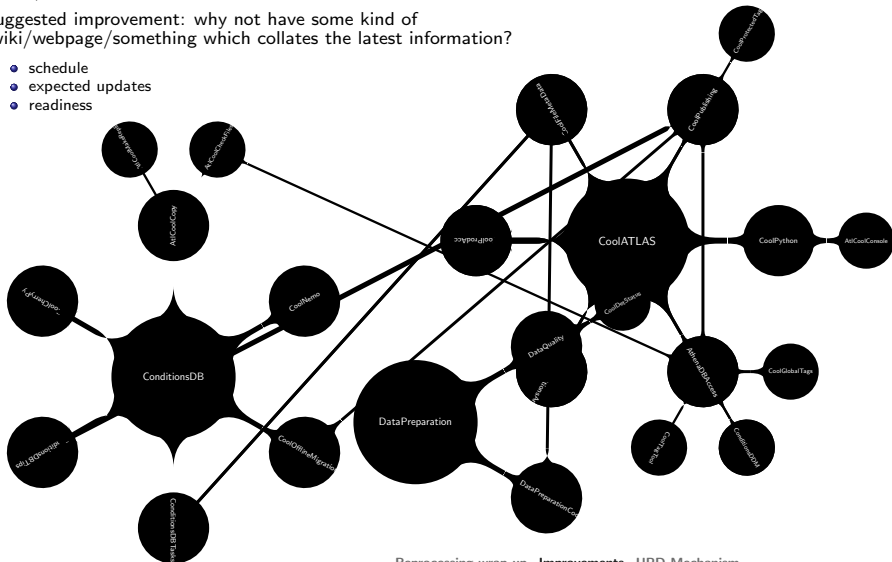


SCHEMA / DB	TAG	DETAILS
COMPASS-1	COMPASS-1-001	
COMPASS-1	COMPASS-1-002	
COMPASS-1	COMPASS-1-003	
COMPASS-1	COMPASS-1-004	
COMPASS-1	COMPASS-1-005	
COMPASS-1	COMPASS-1-006	
COMPASS-1	COMPASS-1-007	
COMPASS-1	COMPASS-1-008	
COMPASS-1	COMPASS-1-009	
COMPASS-1	COMPASS-1-010	
COMPASS-1	COMPASS-1-011	
COMPASS-1	COMPASS-1-012	
COMPASS-1	COMPASS-1-013	
COMPASS-1	COMPASS-1-014	
COMPASS-1	COMPASS-1-015	
COMPASS-1	COMPASS-1-016	
COMPASS-1	COMPASS-1-017	
COMPASS-1	COMPASS-1-018	
COMPASS-1	COMPASS-1-019	
COMPASS-1	COMPASS-1-020	

- New **ATLAS COOL Browser**
- Some system experts are not aware of the existence of this tool. We should advertize it more!
- IOV check tool: not made available yet
- Advertize the use of Frontier for KV
- Tag archiving and cleaning procedure
 - Identify conditions tags that have been used in production. That can give us a list of "must keep" tags.
 - The rest is then hopefully a manageable list of tags that *could possibly be* archived
 - Add "obsolete" in the tags description

Documentation

- A lot of excellent and COOL documentation, but scattered
- Merge/concentrate twikis, make a coherent documentation
- Suggested improvement: why not have some kind of twiki/webpage/something which collates the latest information?
 - schedule
 - expected updates
 - readiness



UPD Mechanism: An Incident

Incident 28/10

- TRT calibration for the field-off run 169866 missed the 36h loop
- An exception was made to use the `-ignoremode` option of `AtlCoolMerge.py` to fill that IOV
- The input sqlite file had more IOVs defined than needed
⇒ all the content overwritten
- Luckily, the tag content had very few and well documented updates
- Quick reaction by the expert and the whole content was re-uploaded
- But otherwise, that could have been very bad!



Recovery procedure

Lessons

- The UPD mechanism is our **safety net** against accidental mess-up
- The **-ignoremode** option of AtICoolMerge.py ignores protection mode of the destination tag, allowing to overwrite data down to zero IOV
- This special option should be used only when initialising a new UPDX tag
- ✗ Can be used by all at any time, and not only at the UPDX-tags creation
- ATLAS DBAs (not on-call) can undo transactions of the last 3 hours. We never used this option so far.
- The **-ignoremode** option will be disabled and the protected-tags creation will be left in the hands of the experts
- We need to define a recovery procedure

