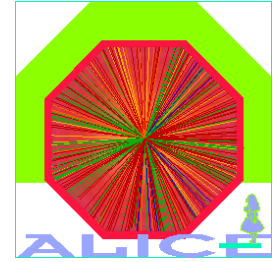


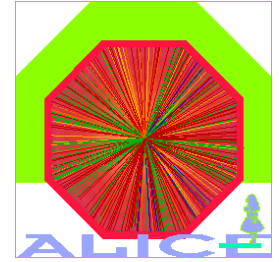
Updates on OCDB and SHUTTLE



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CERN, November 15, 2007

OCDB info in the ESD



- OCDB information is now stored in the ESD's UserInfo list
 - ➔ the list of the **AliCDBId**'s of the retrieved parameters;
 - ➔ the list (map) of the **storages** activated (default + specific), e.g.:

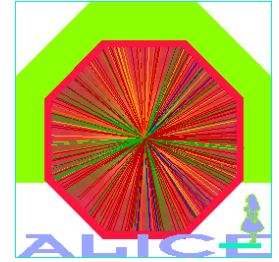
Key (TObjString*)	Value (TObjString*)
"local"	"alien://folder=..."
"TPC/Calib/*"	"local://..."
...	...

- To get the info:

```
TFile* f = new TFile("AliESDs.root");
TTree* tree = f->Get("esdTree");
TList* list = tree->GetUserInfo();

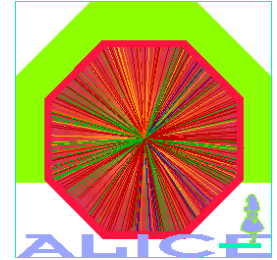
TList* ids = list->FindObject("cdbList");
TMap* storages = list->FindObject("cdbMap");
```

AliCDBManager's "Lock"



- Aim: prevent the misuse of the CDB functionality in simulation and reconstruction code:
 - ➔ Resetting run number, using a different run number when getting objects, resetting storages...
- Lock is set on with:
 - ➔ `AliCDBManager::Instance() ->SetLock(1);`
 - default is **OFF**
- If Lock is **ON**:
 - it cannot be switched OFF (-> `AliFatal`)
 - run number cannot be reset
 - `Get()` does not accept explicit run number (-> `AliFatal`)
 - CDB storages cannot be activated or closed (-> `AliFatal`)
- Lock is set ON in `AliSimulation` and `AliReconstruction` (after `AliCDBManager` initialization)

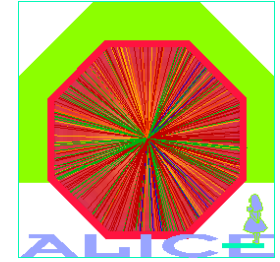
Run number in sim/rec



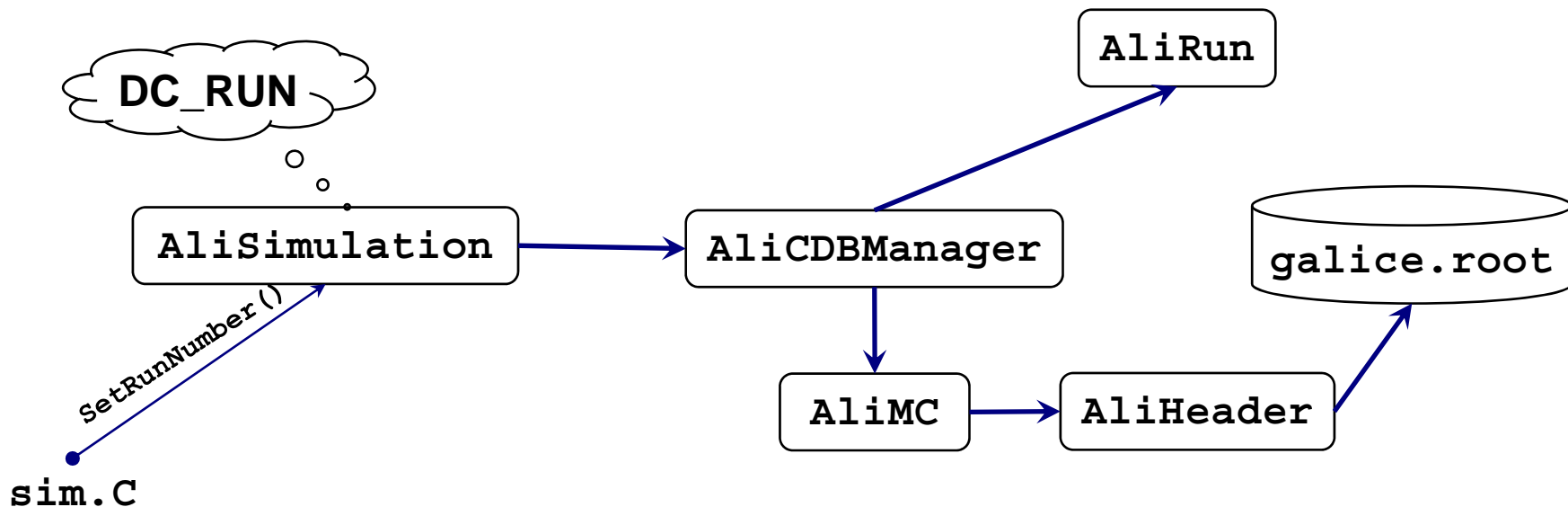
- CDB Manager's lock was useful to detect a couple of problems both in the detectors' and in the steering classes
- This was also an opportunity to investigate and "make some order" in the way the run number is defined, stored and retrieved 😊
- Current implementation (e.g. in actual production):
 - ➔ The run number is declared through an **environmental variable**;
 - ➔ It is read in `Config.C` and set into `gAlice`;
 - Run number of `gAlice` is not persistent!
 - ➔ In `AliSimulation`, `gAlice` gives run number to `AliCDBManager`;
 - ➔ In `AliMC::BeginEvent()`, run number is read from `gAlice` and set into `AliHeader`;
 - ➔ Run number in `AliHeader` is persistent; to read it back with the run loader:

```
AliRunLoader* rl = AliRunLoader::Open("galice.root");  
rl->LoadgAlice();  
rl->LoadHeader();  
Int_t run = rl->GetAliRun()->GetHeader()->GetRun();
```

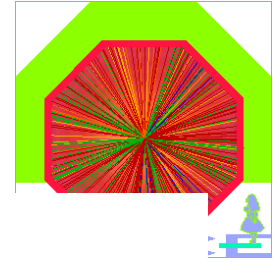
New implementation in sim/rec



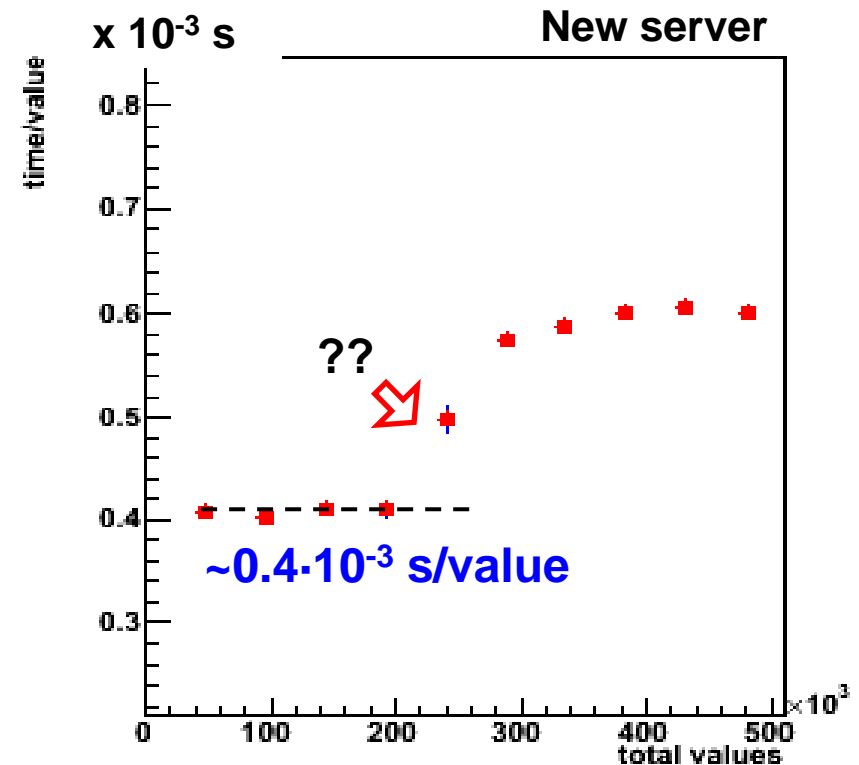
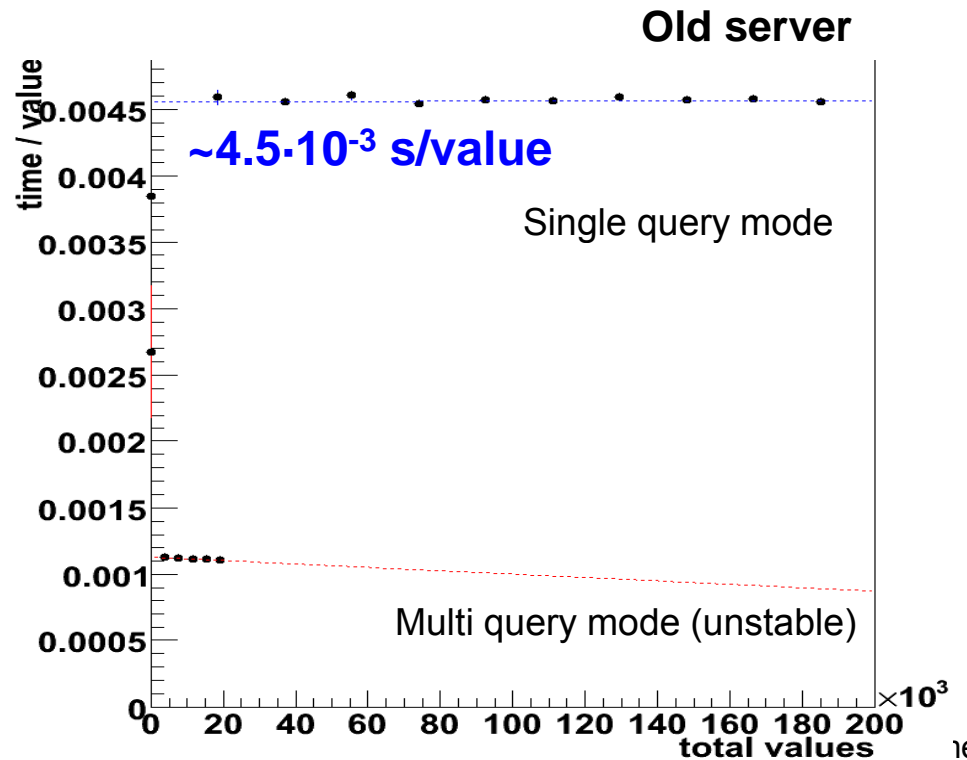
- Proposed approach (in the HEAD):
 - ➔ Run number (and generator seed!) is now defined in `AliSimulation`:
 1. Via **environmental variable** `DC_RUN` (`CONFIG_SEED` for the seed);
 2. Via `AliSimulation` setter `SetRunNumber()` (and `SetSeed()`)
 - ➔ Option 2. overrides option 1.!
 - ➔ Run number is set in `AliCDBManager`
 - ➔ `AliCDBManager` gives the run number to `AliRun` and `AliHeader` (in `AliMC`)
 - In this way `AliRun`'s run number could even be removed!



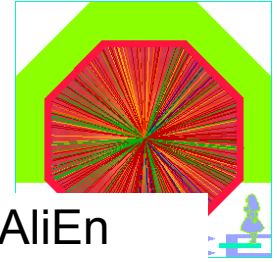
SHUTTLE news – DCS



- OFFLINE – DCS Archive communication protocol + AMANDA server + Offline client redesigned by DCS and SHUTTLE teams
 - ➔ Stability problems fixed
 - ➔ Queries to Amanda are now ~10 times faster (compared to single query mode)
 - ➔ Benchmarking still in progress: still room for improvement and some issues still open (“Keep alive” messages, “bonus values” etc.)



SHUTTLE news – Preprocessors



- GRP preprocessor stores **merged raw data tags** in the run folder in AliEn (year and LHC period taken from run logbook):

`/alice/data/<year>/<LHCperiod>/<Run>/Raw` e.g.

`/alice/data/2007/LHC07a/000001234/Raw`

- ➔ OCDB base folder is now the “official” one:

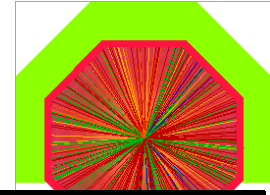
`/alice/data/<year>/<LHCperiod>/OCDB`

- Waiting for **CTP configuration file** and output file from **scalers** (to be rootified and stored by GRP)
 - ➔ CTP data will be available on the DCS FXS

- New preprocessors:
 - ➔ MUON Trigger (complete)
 - ➔ FMD (not yet complete)
 - ➔ VZERO (complete)

- Updated preprocessors:
 - ➔ SPD
 - ➔ ZDC (now complete – Crash in reconstruction fixed)

SHUTTLE preprocessor status



	GRP	ACO RDE	EMCAL	HMPID	FMD	ITS SPD	ITS SDD	ITS SSD	MU TRG	MU TRK	PHOS EMC	PHOS CPV	PMD	T0	TOF	TPC	TRD	V0	ZDC
Preprocessor					X				X									X	
Test	X				X				X					X				X	
Reco Test	O				tbd				tbd										X
Failover Test	X				X		X			X						X	X		X
DAQ DA																			
DAQ FXS output files					X				X									X	
DCS DP names						O			O X				X					X	
Preprocessor reads DPs						O			O X				X					X	
DCS DA	O	O		O		O	O	O	O X				O					O	O
DCS FXS output files		O		O		O	O	O	O X				O					O	O
HLT DA	O	O		O	O	O	O	O	O X	O			O	O	O			O	O
HLT FXS output files	O	O		O	O	O	O	O	O X	O			O	O	O			O	O

O = nothing to be done

X = Changed since 12.10.07

Last Update: 14.11.07