

FEBRUARY RUN SHUTTLE SUMMARY

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...and with the special participation of
Alberto Colla...

Data load: some numbers

➤ **8890** runs processed by Shuttle (from Feb 13th)

DAQ FXS

Detector	n. Files in valid runs	n. of processed files in valid runs	Total size (MB)	% files processed
GRP	3321	3082	2586	93
MCH	489	376	1749	77
SDD	34	20	151	59
SPD	878	574	21	65
SSD	51	19	182	37
T0	707	586	99	83
TOF	693	661	465	95
TPC	397	148	185	37
Sum	6570	5466	5659	83


DCS
FXS

Detector	N. of files	Total size (MB)	% files processed
GRP	1549	1.4	80

DAQ Issues

- ~ Shuttle still working in self-triggering mode.
- ~ Only runs with valid start_time/end_time/number of events (according to DAQ logbook) were processed.
- ~ From S. Chapeland – ALICE Week, 31st March 2008, DAQ session:

- ~ **DAs:**

- ~ 14 DA in production; 
- ~ 3 DA installed for testing;
- ~ 3 DA from AliRoot release, 14 from (various) trunk ().

- ~ **FXS:**

- ~ Working properly: files were put by DAs and shipped by the Shuttle, as expected (see before for details).

 *Shuttle always working with the latest Release of AliRoot!*

ECS Run Types

- ~ Proper definition of ECS Run Types required:
 - ~ The Shuttle doesn't distinguish among run types → not able to discriminate between useful/debugging/test/whatever runs:
 - ~ Many runs processed without real reason, delaying processing and as a consequence availability of condition data for “real” runs
 - ~ Action by detectors required...
 - ➔ protection added in preprocessor (see JF's talk)

DCS Issues

- ~ **Data Points (DP):** *(see later)*
 - ~ ~ 41% of the declared DPs were used;
 - ~ Some detectors still have to declare them...
- ~ **FXS:**
 - ~ Used only by GRP, implementation still missing for some detectors, even if everything is already there!
- ~ Bonus Value still missing → currently working on it
- ~ Keep Alive not yet present
- ~ Time Zone related issues – solved during the commissioning exercise

Data load: DCS DPs

↪ DCS datapoints used in the FDR

Detector	Datapoints declared	Datapoints actually used
ACO	60	60
EMC	missing	
FMD	missing	
HMP	422	422
MCH	788	0
MTR	not needed	
PHS	80	not running
CPV	missing	
PMD	48	not running
SPD	not needed	

Detector	Datapoints declared	Datapoints actually used
SDD	1820	1564
SSD	missing	
TOF	360	360
TPC	681	411
TRD	3258	372
T00	157	0
V00	64	0
ZDC	28	28
GRP	12	6
Sum	7778	3223

HLT Issues

~ **FXS:**

~ There and operational, but still nobody using it....

SHUTTLE preprocessor status in the FDR

	GRP	ACO	EMC	HMP	FMD	SPD	SDD	SSD	MTR	MCH	PHS	CPV	PMD	T00	TOF	TPC	TRD	V00	ZDC
Preprocessor		X																	
Working			not part			X	X	X	X	X	not part	not part	not part	X			X		
DAQ FXS output files					X	X	X	X						X	X	X			
DCS DPs						O	X		O						X				
DCS FXS output files	X	O		O		O	O	O	O				O					O	O
HLT FXS output files	O	O		O	O	O	O	O	O	O			O	O	O			O	O

X = changed since December exercise

O = nothing to be done

Last Update: 11.03.08

SHUTTLE AOB

- ~ **Condition data** produced by preprocessors stored in /alice/data/2008/LHC08a/OCDB;
- ~ Some bug fixes (DCS timeout, send mail);
- ~ Some extra checks added (connection to AMANDA, transferred files);
- ~ ACORDE preprocessor added;
- ~ SDD DPs added (even if not all of them);
- ~ Complying with the detectors' needs as much as possible;
- ~ ...but they're all *minor* things, everything was already well in shape, thanks to Alberto and Jan Fiete.

The Offline Shift – Some Feedback

- Wiki page to collect instructions, comments, raising issues, to find critical services experts:
<https://twiki.cern.ch/twiki///bin/view/ALICE/OfflineShifterManual>;
- “Expert system” framework in development
- Monalisa monitoring page to follow the shuttle processing:
<http://pcalimonitor.cern.ch/shuttle.jsp?instance=PROD>;
- Night shifts very useful – inspiring atmosphere?
- Online Reconstruction issue arose;
- QA debugging;
- Setting of graphical interface on the Offline console;
- Giving friendly support to detectors.

Open Issues

- ~ 748 runs without start time in logbook (nearly 10%)
 - ~ Distributed over many run types
 - ~ Even DAs were producing files for these runs
 - ~ Explains not processed files on FXS
- ~ ECS EOR signal **not present** (SHUTTLE ran in self-triggering mode)
 - ~ SHUTTLE table was not filled at EOR (not SOR)
 - ~ Implemented by DAQ!
 - ~ Some runs (~10%) entered the logbook without valid start and end time
 - ~ These runs were marked done by the Shuttle and not processed later (following an agreement with DAQ)
 - ~ Start and end time updated later by DAQ
- ~ DCS
 - ~ Problem with timezones on the DCS machines fixed (prevent retrieval of some datapoints)

Conclusions

~ Many **thanks** to:

~ detector experts

~ online systems' experts (DAQ/DCS/HLT/TRG)

~ core offline members

collaborating with the Shuttle team for the success of the last cosmic run.

~ ...and many thanks to Alberto Colla, for his constant presence and support.