



ALICE

ALICE Data Quality Monitoring

Introduction to shifter's operations

Part 3

D. De Gruttola for the DQM core

CERN, 06th May 2018

Introduction to DQM shifter's operations

- Reporting and the ALICE logbook -

Reporting detectors problems

Reporting framework/AMORE problems

Log entries and End-Of-Shift report

Runs @ ALICE logbook

DQM information

How to retrieve and archive objects

How to check Run Quality Flag per detector

Reporting detector's problems

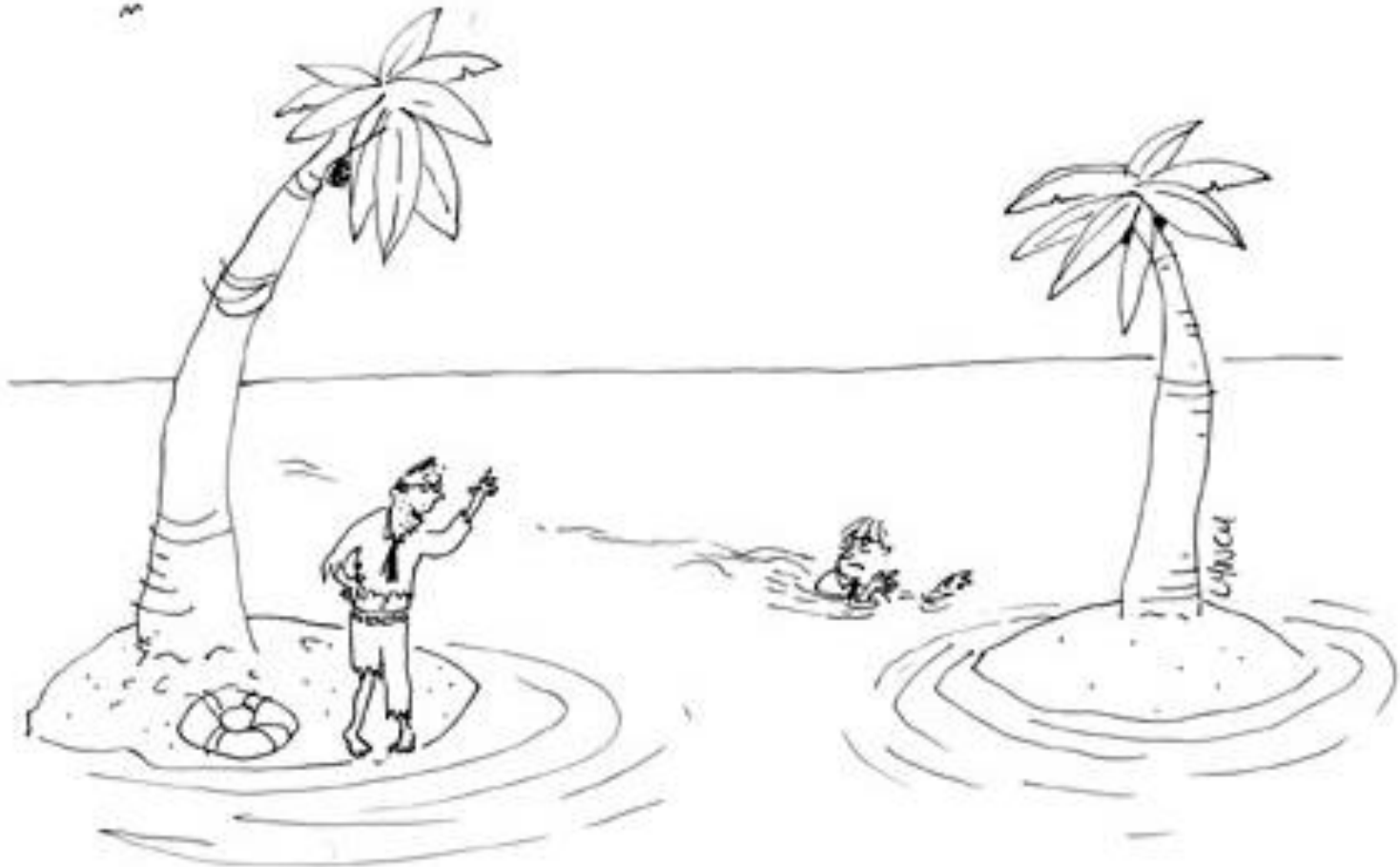
- **What is a “detector problem”?**
 - **A yellow/red/purple quality flag**
 - Most of the plots have lines to mark limits for expected values
 - Some plots have warning/alarm boxes that tell you so ...
 - Anything that is referred to as so in the detector's Twiki

- **What to do?**
 - Check first the instructions in the Twiki

... (continue in next slide) ...

Reporting detector problems

- Report Immediately to the **shift leader**

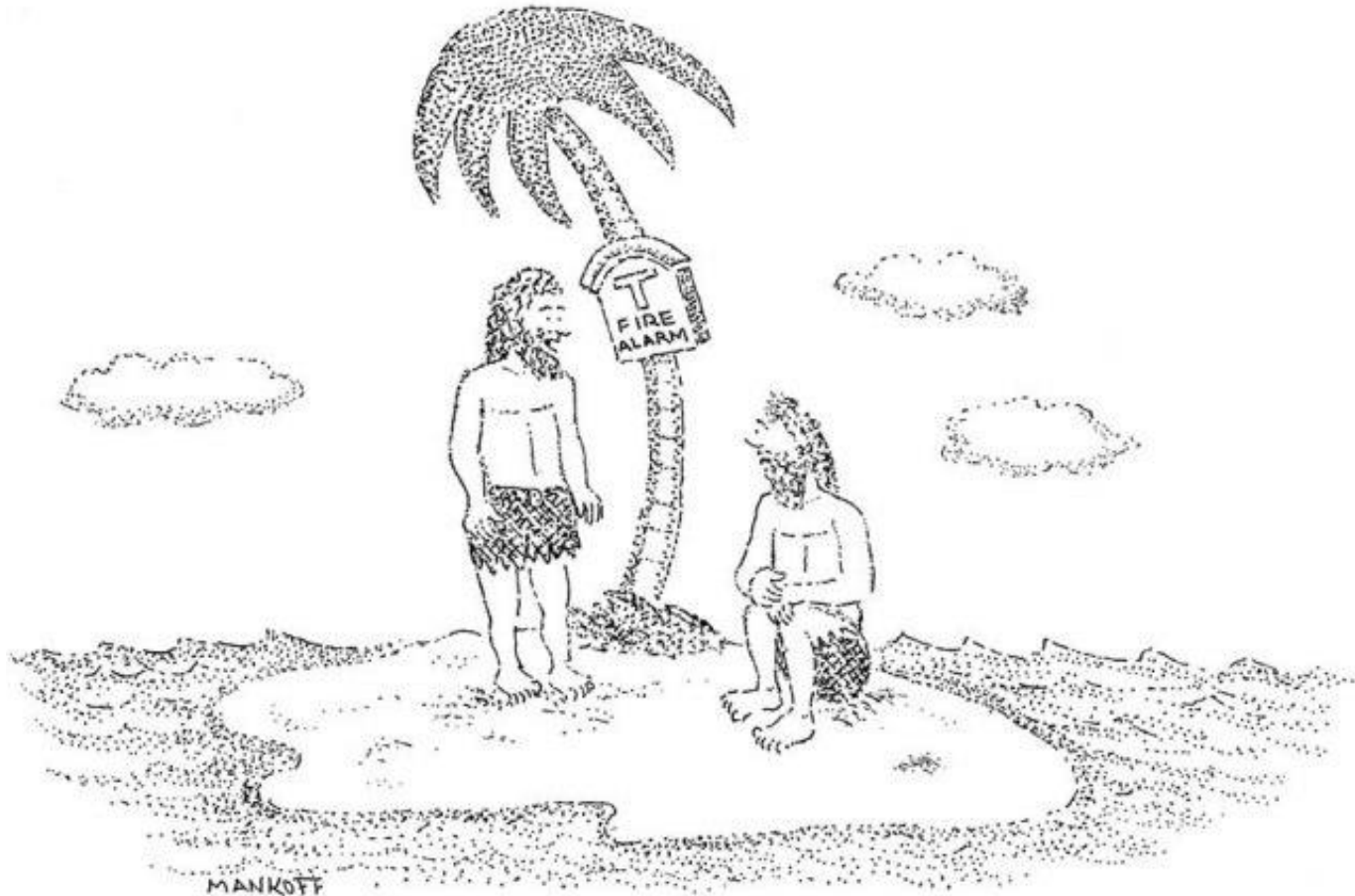


"Thank God! Somebody to network with!"

Do not be afraid of interacting with the other shifters!!!

Reporting detector problems

- Discuss with him if to report to the **detector on-call/experts** (unless differently specified in the twiki instructions)



"I still say we pull it and deal with the consequences of its being a false alarm when they come."

Reporting detector's problems



- **What to do?**
 - Check first the instructions in the Twiki
 - Report Immediately to the **shift leader**
 - Discuss with him if to report to the **detector on-call/experts** (unless differently specified)
 - Mention the problem in a dedicated **logbook entry if not quickly solved**
 - **If a problem appears in a specific run, add a logbook entry as a comment on it (do not wait the EOS!), except agent crashes**
 - **do not make separate entries for agent crashes: add the info in the EOS report and attach logs (select the interested subsystems when posting the EOS report)**
 - Mention it in your **EOS report**

Please be accurate in your reports!

Reporting framework/AMORE problems



- Report problems of the DQM framework
 - call the **DQM on-call** when problems that prevent normal online operations occur
 - if there was an agent crash report it **in the EOS, attaching logs to the entry and selecting the interested subsystem** (do not send emails to the detector DQM experts for crashes)
 - send an email to DAQ mailing list (**alice-datesupport@cern.ch**) only if the troubleshooting section of the Twiki suggests to do so for typical errors!

**Please try to provide useful logs and error traces to allow people to debug!
Please specify the run conditions when the problem occurred!**

DQM core for support: alice-dqm-support@cern.ch

Policy for reporting – main recommendations



- Problems that affect one specific run should be mentioned in a comment attached to the run entry in the logbook
- Select DQM/QA when posting the EOS report
- Select the subsystems interested by an agent crash when posting the EOS report
- Attach to the EOS report the logs of the agent's crashes, do not send emails (anymore)
- Write a separate EOS report for Offline and DQM (will be automatically sent to different responsible mailing lists)

Log entries and End-Of-Shift report



Add your EOS report as Log Entry

Make sure you have writing permissions on the logbook before coming to the shift!

ALICE Electronic Logbook v1.92 Daniele De Gruttola [Logout]

Logbook | Runs | Fills | Admin | Links

Log Entries | Announcements | On Call Interventions

Add Gas Log Entry

Browsing: 1 of 3

Log Entries filters: Local filters, Created: Last 24 Hours

View mode: Compact

Add Log Entry

Created	Subsystem	Class	Type	Run	Author	Title	Log Entry	Followups	Files	Actions
14/01/2015 18:13:37	TRD	HUMAN	GENERAL		Michael Andreas	Re Filling the TR	Filling still ongoing: current mixture has 62 %			
14/01/2015 17:53:16		PROCESS	GENERAL	208766		EOR report by E	Run stopped by ECS for the following reason:			
14/01/2015 17:50:48		PROCESS	GENERAL	208765		EOR report by E	Run stopped by ECS for the following reason:			
14/01/2015 17:49:03		PROCESS	GENERAL	208764		EOR report by E	Run stopped by ECS for the following reason:			
14/01/2015 17:46:58		PROCESS	GENERAL	208763		EOR report by E	Run stopped by ECS for the following reason:			
14/01/2015 17:46:01		PROCESS	GENERAL	208762		EOR report by E	Run stopped by ECS for the following reason:			
14/01/2015 17:40:51		PROCESS	GENERAL	208758		EOR report by E	Run stopped by ECS for the following reason:			
14/01/2015 17:39:49		PROCESS	GENERAL	208757		EOR report by E	Run stopped by ECS for the following reason:			
14/01/2015 17:38:37		PROCESS	GENERAL	208755		EOR report by E	Run stopped by ECS for the following reason:			
14/01/2015 17:35:53		PROCESS	GENERAL	208740		EOR report by E	Run stopped by ECS operator for the followin			
14/01/2015 17:33:39	TPC	HUMAN	HARDWARE		Chilo	FC no control	There is no control on the FC Heinzinger powe			
14/01/2015 16:47:34		PROCESS	GENERAL	208739		EOR report by E	Run stopped by ECS operator for the followin			
14/01/2015 16:44:28		PROCESS	GENERAL	208733		EOR report by E	Run stopped by ECS operator for the followin			
14/01/2015 16:13:30	Multiple	HUMAN	HARDWARE		Caterina	Re Problem with	By Ton: Attached is a graph with the pressure		1	
14/01/2015 16:11:08		PROCESS	GENERAL	208720		EOR report by E	Run stopped by ECS operator for the followin			
14/01/2015 15:23:47		PROCESS	GENERAL	208715		EOR report by E	Run stopped by ECS operator for the followin			
14/01/2015 15:13:21		PROCESS	GENERAL	208714		EOR report by E	Run stopped by ECS for the following reason:			

Log entries and End-Of-Shift report



Specify Type: EOS

Specify Subsystems: DQM/QA (+ subsystems in case of agent crashes)

Add Log Entry

Source: (*) Francesca Bellini

Class: (*) HUMAN

Type: (*) DQM/QA

Subsystems:

<input type="checkbox"/> ACORDE	<input type="checkbox"/> ADA	<input type="checkbox"/> BCM	<input type="checkbox"/> BPTX	<input type="checkbox"/> CPV	<input type="checkbox"/> CTP	<input type="checkbox"/> DAQ	<input type="checkbox"/> DAQ_TEST
<input type="checkbox"/> DCS	<input checked="" type="checkbox"/> DQM/QA	<input type="checkbox"/> EMCal	<input type="checkbox"/> FMD	<input type="checkbox"/> Gas	<input type="checkbox"/> General	<input type="checkbox"/> HLT	<input type="checkbox"/> HMPID
<input type="checkbox"/> LHC Interface	<input type="checkbox"/> Magnets	<input type="checkbox"/> MUON_TRG	<input type="checkbox"/> MUON_TRK	<input type="checkbox"/> Offline	<input type="checkbox"/> On Call Interventions	<input type="checkbox"/> PHOS	<input type="checkbox"/> PMD
<input type="checkbox"/> Run Coordination	<input type="checkbox"/> Sarety	<input checked="" type="checkbox"/> SDD	<input type="checkbox"/> SPD	<input type="checkbox"/> SSD	<input type="checkbox"/> T0	<input type="checkbox"/> Technical Coordination	<input type="checkbox"/> TOF
<input type="checkbox"/> TPC	<input type="checkbox"/> TRD	<input type="checkbox"/> Trigger	<input checked="" type="checkbox"/> V0	<input type="checkbox"/> ZDC			

Open Ticket:

Title: (*) DQM EOS report - day 15/05/2011*

Log Entry: (*)

```
aldaqacr09 machine restored  
  
PHYSICS RUNS with pp@7 TeV beam: 151654 (bad run, noisy SPD chip), 151655, 151660, 151661, 151662, 151663,151664,151665  
TECHNICAL RUNS: none  
  
Training: John Doe arrived at 8.00 and left at 16.00 for the training  
  
1. Detectors  
=====
```

Files:

Attach a new file

Selected files

Filename: Sfoglia...

Title:

Attach file

The fields marked with (*) are mandatory.

Submit Cancel

Log entries and End-Of-Shift report

Be detailed!

- Report about trainees
- Report runs (physics + technical)
- Always specify run numbers when reporting problems for the detectors
- Always specify run numbers and run type when reporting crashes of agents
- Report new items
- Report former items -> specify if issues are still open or solved!

Follow the template here:

https://twiki.cern.ch/twiki/bin/viewauth/ALICE/DQM_EOS_Template

Title: (*) DQM EOS report - day 15/05/2011*

Log Entry: (*)

aldagaqr09 machine restored

PHYSICS RUNS with pp#7 TeV beam: 151654 (bad run, noisy SPD chip), 151655, 151660, 151661, 151662, 151663,151664,151665
TECHNICAL RUNS: none

Training: John Doe arrived at 8.00 and left at 16.00 for the training

1. Detectors

=====

Files:

Attach a new file

Selected files

Filename:

Sfoggia...

Title:

Attach file

The fields marked with (*) are mandatory.

Submit

Cancel

Submit entry and remember to confirm also the preview!

Runs @ ALICE logbook



Go to the **Runs > Statistics** page

ALICE Electronic Logbook v1.61 Francesca Bellini [Logout]

Logbook **Runs** | Filters | Admin | Links Run Quick Access:

Statistics | Detector Calibration | Big Screen View

Runs filters | **Quick Access** | **Actions**

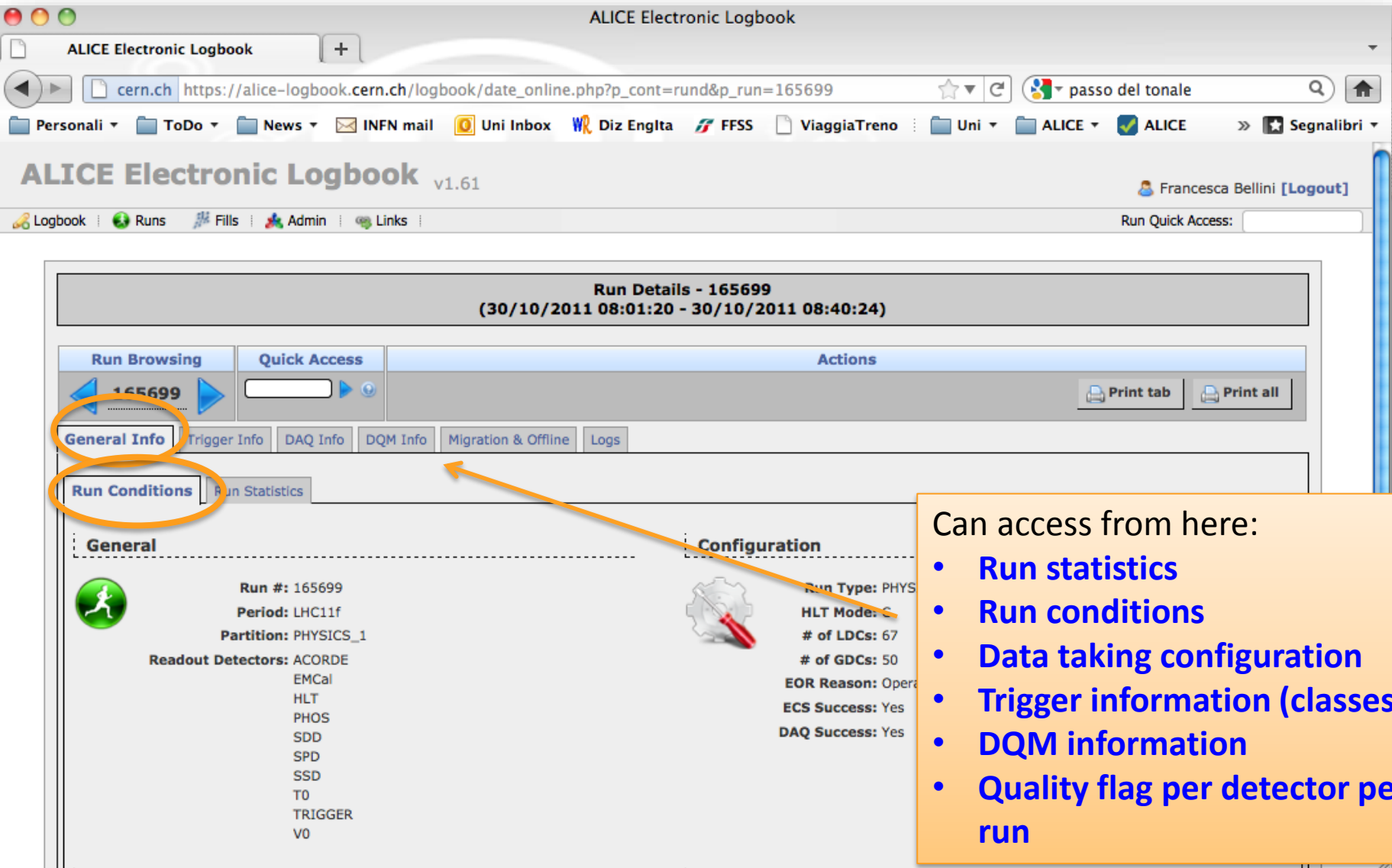
Local filters
DAQ Start Time: Last Week
Run Type: PHYSICS

Export... | Fields...

Statistics | Detectors | Trigger Clusters | Trigger Classes | Quality Flags | Shuttle | Beam Conditions | Overview

Beam	Run	Run Type	Duration	Total Events	Total SubEvents	DAQ Start Time	DAQ End Time	# of Detectors	Event Rate	Period	Data Migrated	Partition	# of LDCs	SubEvent Rate	HLT Mode
	165746	PHYSICS	1 m	1 911	1 157	30/10/2011 16:19:15	30/10/2011 16:20:42	13	21.97	LHC11f	Yes	PHYSICS_1	160	13.30	C
	165745	PHYSICS	5 m	25 896	41 002	30/10/2011 16:08:48	30/10/2011 16:13:18	13	95.91	LHC11f	Yes	PHYSICS_1	160	151.86	C
	165744	PHYSICS	21 m	62 833	76 038	30/10/2011 15:38:12	30/10/2011 15:59:29	13	49.20	LHC11f	Yes	PHYSICS_1	160	59.54	C
	165743	PHYSICS	1 m	1 867	1 405	30/10/2011 15:26:33	30/10/2011 15:27:52	12	23.63	LHC11f	Yes	PHYSICS_1	155	17.78	C
	165742	PHYSICS	1 m	1 904	1 401	30/10/2011 15:21:34	30/10/2011 15:22:55	12	23.51	LHC11f	Yes	PHYSICS_1	155	17.30	C
	165741	PHYSICS	11 m	70 106	84 535	30/10/2011 15:04:22	30/10/2011 15:15:27	13	105.42	LHC11f	Yes	PHYSICS_1	160	127.12	C
	165740	PHYSICS	10 m	61 760	74 673	30/10/2011 14:43:42	30/10/2011 14:53:32	11	104.68	LHC11f	Yes	PHYSICS_1	131	126.56	A
	165738	PHYSICS	1 m	1 494	889	30/10/2011 14:26:37	30/10/2011 14:28:00	11	18.00	LHC11f	Yes	PHYSICS_1	131	10.71	A
	165737	PHYSICS	1 m	655	5	30/10/2011 14:20:45	30/10/2011 14:22:02	11	8.51	LHC11f	Yes	PHYSICS_1	131	0.06	A
	165735	PHYSICS	1 m	1 414	757	30/10/2011 14:16:24	30/10/2011 14:17:46	11	17.24	LHC11f	Yes	PHYSICS_1	131	9.23	A
	165734	PHYSICS	1 m	818	218	30/10/2011 14:10:54	30/10/2011 14:12:16	11	9.98	LHC11f	Yes	PHYSICS_1	131	2.66	A
	165731	PHYSICS	11 m	105 721	104 436	30/10/2011 13:26:40	30/10/2011 13:37:32	10	162.15	LHC11f	No data	PHYSICS_1	67	160.18	C

Retrieving run information



ALICE Electronic Logbook

ALICE Electronic Logbook v1.61

Run Details - 165699
(30/10/2011 08:01:20 - 30/10/2011 08:40:24)

Run Browsing: 165699

Quick Access: [input]

Actions: Print tab, Print all

General Info | Trigger Info | DAQ Info | DQM Info | Migration & Offline | Logs

Run Conditions | Run Statistics

General

Run #: 165699
Period: LHC11f
Partition: PHYSICS_1
Readout Detectors: ACORDE, EMCal, HLT, PHOS, SDD, SPD, SSD, TO, TRIGGER, VO

Configuration

Run Type: PHYS
HLT Mode: C
of LDCs: 67
of GDCs: 50
EOR Reason: Oper
ECS Success: Yes
DAQ Success: Yes

Can access from here:

- Run statistics
- Run conditions
- Data taking configuration
- Trigger information (classes)
- DQM information
- Quality flag per detector per run

Retrieving run statistics



ALICE

ALICE Electronic Logbook

ALICE Electronic Logbook v1.61

Francesca Bellini [Logout]

Run Quick Access:

Run Details - 165699
(30/10/2011 08:01:20 - 30/10/2011 08:40:24)

Run Browsing: 165699


Quick Access:

Actions: Print tab, Print all


General Info | Trigger Info | DAQ Info | DQM Info | Migration & Offline | Logs

Run Conditions | Run Statistics

Date/Time


 ECS Start Time: 30/10/2011 08:01:20
DAQ Start Time: 30/10/2011 08:02:48
CTP Start Time: 30/10/2011 08:02:55
CTP End Time: 30/10/2011 08:39:31
DAQ End Time: 30/10/2011 08:40:19
ECS End Time: 30/10/2011 08:40:24
Duration: 00:37:31
Pause Duration: 00:00:00

Data Taking - Readout


 Export to PDF Excel

Cluster	Total SubEvents	SubEvent Rate	Total Data (MB)	Data Rate (MB/s)
1	12 011	5.34	6 086	2.70
2	248 939	110.59	145 471	64.63

Data Taking - Event Building

 Total Events: 264 580
Event Rate: 117.54

Data Taking - Recording

 Total Data (MB): 91 233
Data Rate (MB/s): 40.53

Retrieving trigger information



ALICE Electronic Logbook

ALICE Electronic Logbook v1.61

Run Details - 165699
(30/10/2011 08:01:20 - 30/10/2011 08:40:24)

Run Browsing: 165699

Quick Access:

Actions

General Info **Trigger Info** DAQ Info DQM Info Migration & Offline Logs

Cluster **Classes** Inputs Configuration HLT Expert View

Export to PDF Excel

Trigger Classes					Counters						Rates (Hz)					
Class ID	Class Name	Cluster #	Group ID	Time (s)	L0b	L0a	L1b	L1a	L2b	L2a	L0b	L0a	L1b	L1a	L2b	L2a
0	CTRUE-B-NOPF-ALLNOTRD	1	1	1	257 817 809	2 632	2 632	2 632	2 632	2 632	28 646 423	292.4	292.4	292.4	292.4	292.4
1	CINT7-AC-NOPF-ALLNOTRD	1	3	3	514 313	9 264	9 264	9 264	9 265	9 265	17 144	308.8	308.8	308.8	308.8	308.8
2	CINT7-E-NOPF-ALLNOTRD	1	3	3	243	5	5	5	5	5	8.1	0.17	0.17	0.17	0.17	0.17
3	CVBAND-B-NOPF-ALLNOTRD	1	0	0	1 074 907 465	0	0	0	0	0	489 039	0	0	0	0	0
4	CVBAND-AC-NOPF-ALLNOTRD	1	0	0	38 004 068	0	0	0	0	0	17 290	0	0	0	0	0
5	CVBAND-E-NOPF-ALLNOTRD	1	0	0	17 677	0	0	0	0	0	8.0	0	0	0	0	0
6	CPHI7-AC-NOPF-ALLNOTRD	1	8	236	739 432	103	103	103	103	103	342.6	4.77E-2	4.77E-2	4.77E-2	4.77E-2	4.77E-2
7	CPHI7-E-NOPF-ALLNOTRD	1	8	236	373	0	0	0	0	0	0.17	0	0	0	0	0
8	C0TVX-B-NOPF-ALLNOTRD	1	8	236	253 965 846	0	0	0	0	0	117 686	0	0	0	0	0

DQM Info



ALICE Electronic Logbook

ALICE Electronic Logbook v1.61

Francesca Bellini [Logout]

Logbook | Runs | Fills | Admin | Links | Run Quick Access:

Run Details - 165699
(30/10/2011 08:01:20 - 30/10/2011 08:40:24)

Run Browsing: 165699 | Quick Access: | Actions: Print tab, Print all

General Info | Trigger Info | DAQ Info | **DQM Info** | Migration & Offline | Logs

DQM Agents | Run Quality

Data Quality Monitoring Info

Expand all Collapse all

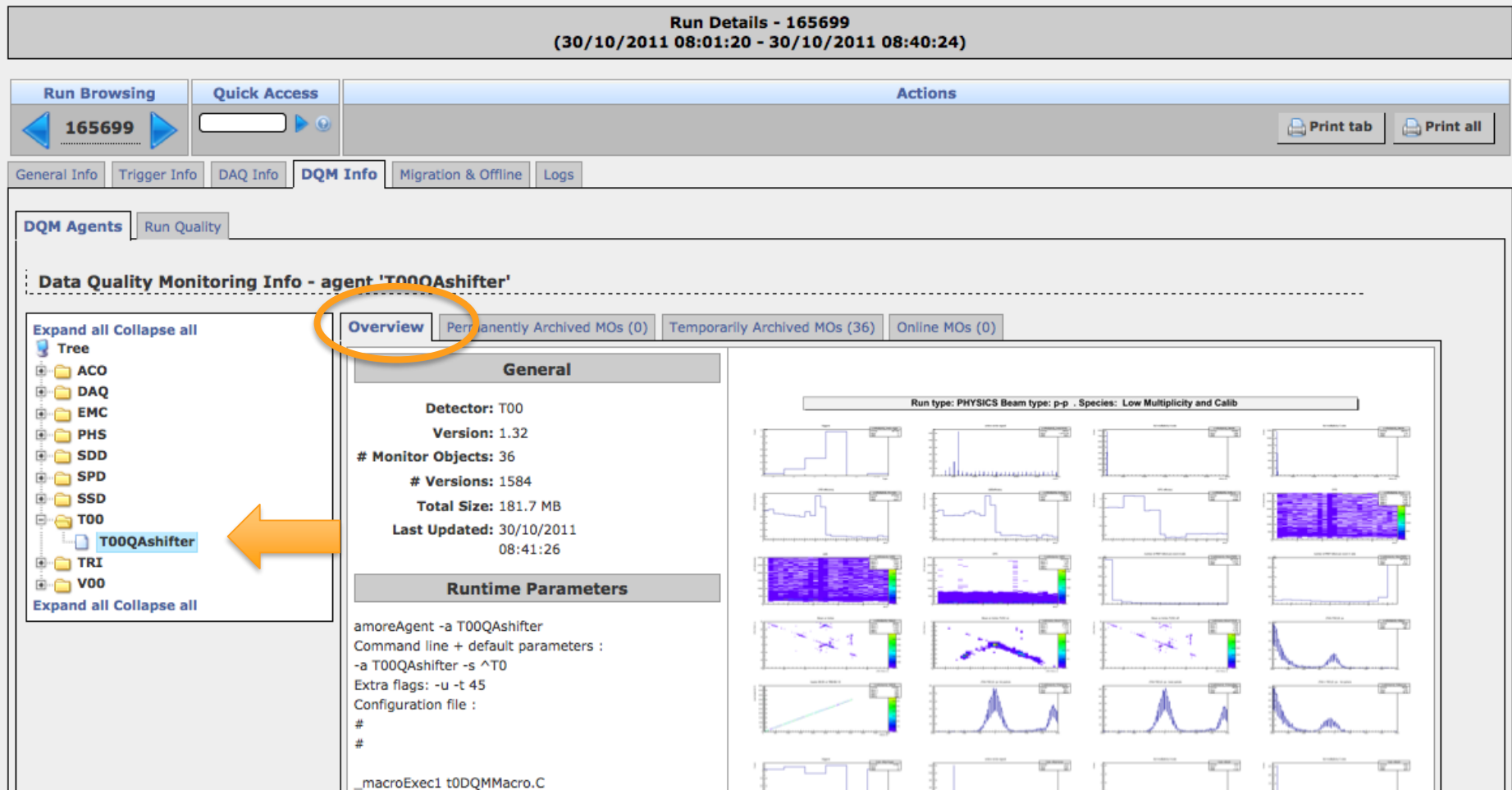
- Tree
- ACO
- DAQ
- EMC
- PHS
- SDD
- SPD
- SSD
- T00
- TRI
- V00

Expand all Collapse all

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DQM Info

Go to the **DQMInfo > DQM agents** tab
Select the desired detector and agent
Look at the summary image from the overview tab

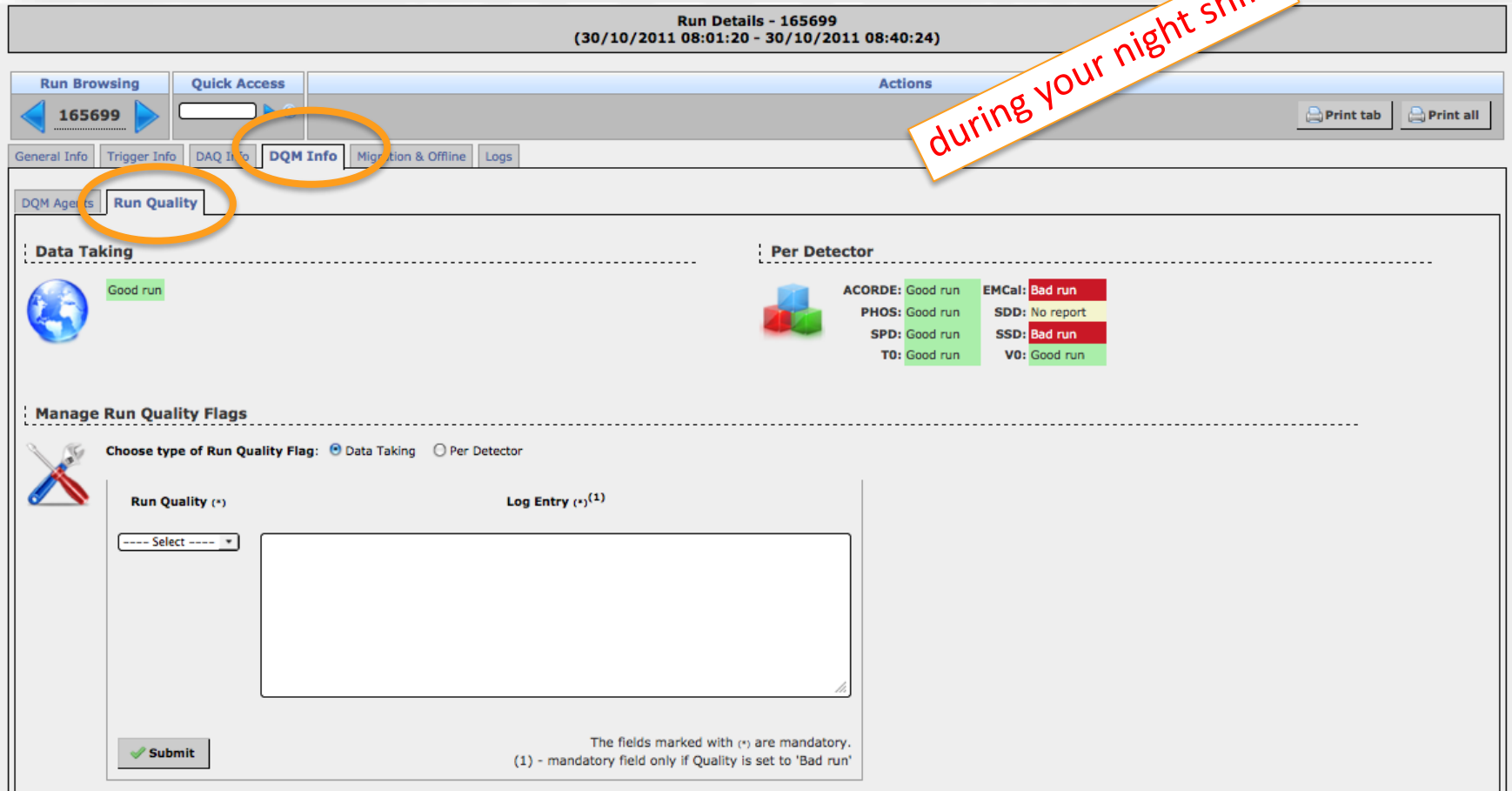


The screenshot displays the DQMInfo web interface for run 165699. The top navigation bar includes 'Run Browsing' (showing run 165699), 'Quick Access', and 'Actions' (with 'Print tab' and 'Print all' buttons). Below this is a tabbed interface with 'DQM Info' selected. The main content area is titled 'Data Quality Monitoring Info - agent 'T00QAshifter'' and features an 'Overview' tab (circled in orange) and sub-tabs for 'Permanently Archived MOs (0)', 'Temporarily Archived MOs (36)', and 'Online MOs (0)'. On the left, a tree view shows the detector hierarchy (ACO, DAQ, EMC, PHS, SDD, SPD, SSD, T00, TRI, V00) with 'T00QAshifter' selected under T00 (indicated by an orange arrow). The 'General' section provides details for the T00 detector: Version 1.32, 36 Monitor Objects, 1584 Versions, Total Size 181.7 MB, and Last Updated 30/10/2011 08:41:26. The 'Runtime Parameters' section shows the command line: `amoreAgent -a T00QAshifter` and `-a T00QAshifter -s ^T0`, along with extra flags `-u -t 45` and the configuration file `_macroExec1 t0DQMMacro.C`. The right side of the overview displays a grid of 16 plots for various monitor objects, with a header indicating 'Run type: PHYSICS Beam type: p-p . Species: Low Multiplicity and Calib'.

Check Run quality flag per detector

Go to the **DQMInfo > Run quality** tab

Check if the detector experts have set the quality flags for the runs taken before 24h ago → **If not, send them an email!**



Run Details - 165699
(30/10/2011 08:01:20 - 30/10/2011 08:40:24)

Run Browsing: 165699

Quick Access: [Search]

Actions: Print tab, Print all

General Info | Trigger Info | DAQ Info | **DQM Info** | Migration & Offline | Logs

DQM Agents: **Run Quality**

Data Taking

Good run

Per Detector

ACORDE:	Good run	EMCal:	Bad run
PHOS:	Good run	SDD:	No report
SPD:	Good run	SSD:	Bad run
TO:	Good run	VO:	Good run

Manage Run Quality Flags

Choose type of Run Quality Flag: Data Taking Per Detector

Run Quality (*) [Select] Log Entry (*)⁽¹⁾

Submit

The fields marked with (*) are mandatory.
(1) - mandatory field only if Quality is set to 'Bad run'

during your night shift

Retrieve old runs / apply filters



ALICE Electronic Logbook v1.61 Francesca Bellini [Logout]

Logbook | **Runs** | Fills | Admin | Links | Run Quick Access:

Statistics
Detector Calibration
Big Screen View

Runs filters | **Quick Access** | **Actions**

Local filters
 DAQ Start Time: Last Week
 Run Type: PHYSICS

Export... Fields...

Statistics | Detectors | Trigger Clusters | Trigger Classes | Quality Flags | Shuttle | Beam Conditions | Overview

Beam	Run	Run Type	Duration	Total Events	Total SubEvents	DAQ Start Time	DAQ End Time	# of Detectors	Event Rate	Period	Data Migrated	Partition	# of LDCs	SubEvent Rate	HLT Mode
	165746	PHYSICS	1 m	1 911	1 157	30/10/2011 16:19:15	30/10/2011 16:20:42	13	21.97	LHC11f	Yes	PHYSICS_1	160	13.30	C
	165745	PHYSICS	5 m	25 896	41 002	30/10/2011 16:08:48	30/10/2011 16:13:18	13	95.91	LHC11f	Yes	PHYSICS_1	160	151.86	C
	165744	PHYSICS	21 m	62 833	76 038	30/10/2011 15:38:12	30/10/2011 15:59:29	13	49.20	LHC11f	Yes	PHYSICS_1	160	59.54	C
	165743	PHYSICS	1 m	1 867	1 405	30/10/2011 15:26:33	30/10/2011 15:27:52	12	23.63	LHC11f	Yes	PHYSICS_1	155	17.78	C
	165742	PHYSICS	1 m	1 904	1 401	30/10/2011 15:21:34	30/10/2011 15:22:55	12	23.51	LHC11f	Yes	PHYSICS_1	155	17.30	C
	165741	PHYSICS	11 m	70 106	84 535	30/10/2011 15:04:22	30/10/2011 15:15:27	13	105.42	LHC11f	Yes	PHYSICS_1	160	127.12	C
	165740	PHYSICS	10 m	61 760	74 673	30/10/2011 14:43:42	30/10/2011 14:53:32	11	104.68	LHC11f	Yes	PHYSICS_1	131	126.56	A
	165738	PHYSICS	1 m	1 494	889	30/10/2011 14:26:37	30/10/2011 14:28:00	11	18.00	LHC11f	Yes	PHYSICS_1	131	10.71	A
	165737	PHYSICS	1 m	655	5	30/10/2011 14:20:45	30/10/2011 14:22:02	11	8.51	LHC11f	Yes	PHYSICS_1	131	0.06	A
	165735	PHYSICS	1 m	1 414	757	30/10/2011 14:16:24	30/10/2011 14:17:46	11	17.24	LHC11f	Yes	PHYSICS_1	131	9.23	A
	165734	PHYSICS	1 m	818	218	30/10/2011 14:10:54	30/10/2011 14:12:16	11	9.98	LHC11f	Yes	PHYSICS_1	131	2.66	A
	165731	PHYSICS	11 m	105 721	104 436	30/10/2011 13:26:40	30/10/2011 13:37:32	10	162.15	LHC11f	No data	PHYSICS_1	67	160.18	C

Retrieve old runs / apply filters



Page Browsing

1-32 of 32 (Page 1 of 1)

Runs filters

Local filters ⌵

DAQ Start Time: Last Week 🔄 🗑️

Run Type: PHYSICS 🔄 🗑️

Quick Access

Actions

📄 Export... 🔗 Fields...

Statistics

Detectors

Trigger Clusters

Trigger Classes

Quality Flags

Shuttle

Beam Conditions

Overview

Beam	Run	Run Type	Start Time	DAQ End Time	# of Detectors	Event Rate	Period	Data Migrated	Partition	# of LDCs	SubEvent Rate	HLT Mode
🔍	165741	PHYSICS	2011 16:19:15	30/10/2011 16:20:42	13	21.97	LHC11f	Yes	PHYSICS_1	160	13.30	C
🔍	165744	PHYSICS	2011 16:08:48	30/10/2011 16:13:18	13	95.91	LHC11f	Yes	PHYSICS_1	160	151.86	C
🔍	165743	PHYSICS	2011 15:38:12	30/10/2011 15:59:29	13	49.20	LHC11f	Yes	PHYSICS_1	160	59.54	C
🔍	165742	PHYSICS	30/10/2011 15:26:33	30/10/2011 15:27:52	12	23.63	LHC11f	Yes	PHYSICS_1	155	17.78	C
🔍	165742	PHYSICS	30/10/2011 15:21:34	30/10/2011 15:22:55	12	23.51	LHC11f	Yes	PHYSICS_1	155	17.30	C
🔍	165741	PHYSICS	30/10/2011 15:04:22	30/10/2011 15:15:27	13	105.42	LHC11f	Yes	PHYSICS_1	160	127.12	C
🔍	165740	PHYSICS	30/10/2011 14:43:42	30/10/2011 14:53:32	11	104.68	LHC11f	Yes	PHYSICS_1	131	126.56	A
🔍	165738	PHYSICS	30/10/2011 14:26:37	30/10/2011 14:28:00	11	18.00	LHC11f	Yes	PHYSICS_1	131	10.71	A
🔍	165737	PHYSICS	30/10/2011 14:20:45	30/10/2011 14:22:02	11	8.51	LHC11f	Yes	PHYSICS_1	131	0.06	A
🔍	165735	PHYSICS	30/10/2011 14:16:24	30/10/2011 14:17:46	11	17.24	LHC11f	Yes	PHYSICS_1	131	9.23	A
🔍	165734	PHYSICS	30/10/2011 14:10:54	30/10/2011 14:12:16	11	9.98	LHC11f	Yes	PHYSICS_1	131	2.66	A

Example of most common filters

DAQ Start Time Filter

Predefined filters

Current Shift

- Select ----
- Active Runs
- Current Shift
- Previous Shift
- Current and Previous Shift
- Last Hour (DateTime Formats)
- Last 24 Hours (DateTime Formats)
- Last Week (DateTime Formats)
- Last 30 Days (DateTime Formats)

Beam Filter

Possible values

Run Type Filter

Free text

(string, % wildcards accepted)

Duration Filter

Predefined filters

Range

Min: (numeric)

Max: (numeric)

HLT Mode Filter

Possible values

- Select ----
- Unknown
- A
- A/Test
- B
- B/Test 1
- B/Test 2
- C

Introduction to DQM shifter's operations

- Additional information -

Event Species

Technical Runs

How to train new shifters

How to update the blackboard

Technical runs

- Dedicated Twiki page (and Twiki page of each single system)
<https://twiki.cern.ch/twiki/bin/viewauth/ALICE/TechnicalRuns>
- From the DAQ point of view a technical run is the same as a physics run.
- From the **trigger** point of view, the trigger in a technical run is simulated, it does not come from "real" physics events.
- During technical runs the **status** of a detector can be either BEAM_TUNING or READY (check the DCS monitoring).
- The DQM shifter should check in the Twiki:
 - which detectors have to be monitored
 - under which event specie summary image appears in the logbook.

Technical runs – Twiki page

<https://twiki.cern.ch/twiki/bin/view/ALICE/TechnicalRuns>

TECHNICAL RUNS

What is a technical run? Differences from a PHYSICS run

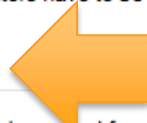
From the DAQ point of view a technical run is the same as a physics run. From the trigger point of view, the trigger in a technical run is simulated, it does not come from "real" physics events.

During technical runs the status of a detector can be either BEAM_TUNING or READY, depending from the detector. The shifter can check the status of the detectors from the [DCS](#) big screen in ACR or the [DCS](#) monitoring web page (also linked to from the ALICE Run Coordination web page) here:

<http://alicedcs.web.cern.ch/AliceDCS/monitoring/main.aspx>

Each detector specifies therefore what should be monitored during technical runs and what should be expected from the plots, taking into account the status of the detector itself. The DQM shifter should check in the following session which detectors have to be monitored and under which event specie the overview of the plots should appear in the ALICE logbook.

What to monitor during technical runs



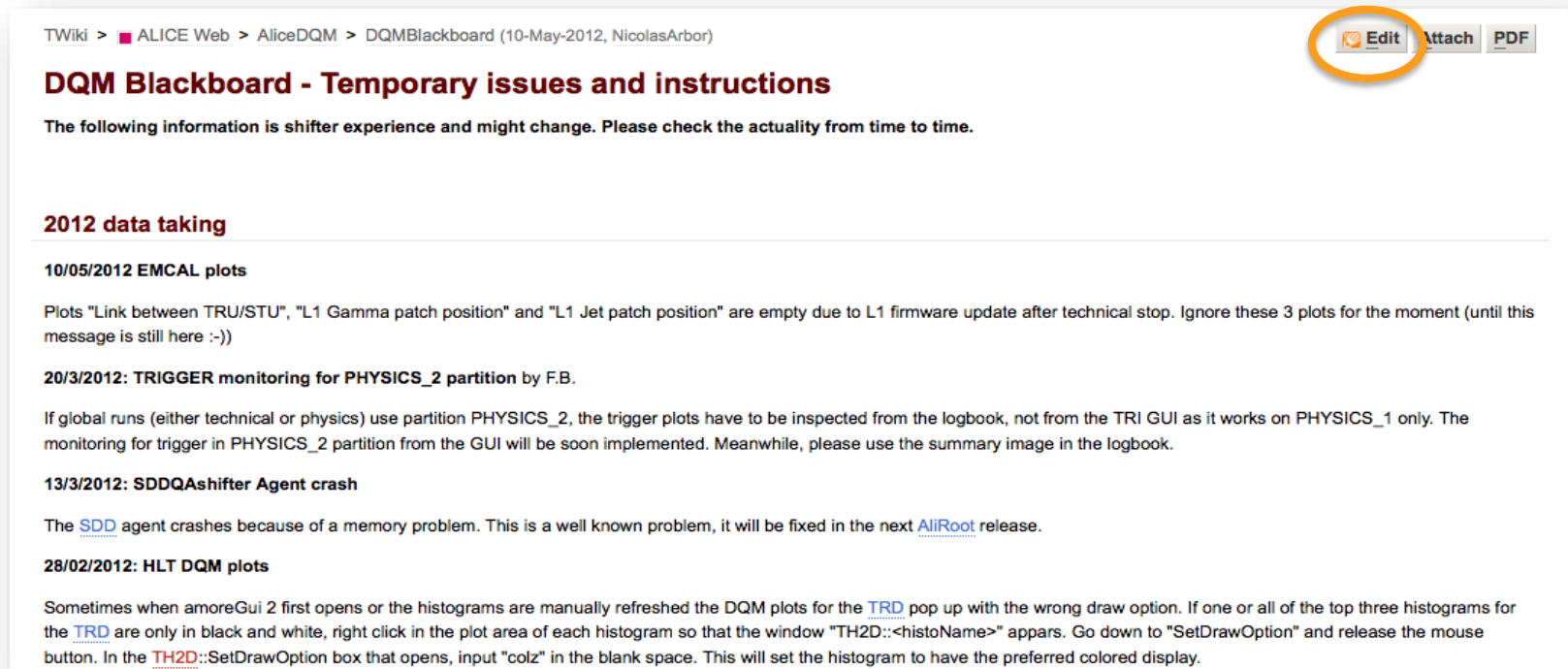
The detectors that asked to be monitored during technical runs and for which instructions are present are the following:

Detector	Monitor?
ACORDE	no
DAQ	yes
EMCAL	no
FMD	yes
HMPID	yes

Modify Twiki blackboard

<https://twiki.cern.ch/twiki/bin/viewauth/ALICE/DQMBlackboard>

1. Access the page
2. Edit it!
3. Scroll down in the editor until you find the blackboard section
4. Add your changes (send an email to daniele.de.gruttola@cern.ch or elisa.meninno@cern.ch)
5. Save!



Twiki > ALICE Web > AliceDQM > DQMBlackboard (10-May-2012, NicolasArbor)

DQM Blackboard - Temporary issues and instructions

The following information is shifter experience and might change. Please check the actuality from time to time.

2012 data taking

10/05/2012 EMCAL plots

Plots "Link between TRU/STU", "L1 Gamma patch position" and "L1 Jet patch position" are empty due to L1 firmware update after technical stop. Ignore these 3 plots for the moment (until this message is still here :-))

20/3/2012: TRIGGER monitoring for PHYSICS_2 partition by F.B.

If global runs (either technical or physics) use partition PHYSICS_2, the trigger plots have to be inspected from the logbook, not from the TRI GUI as it works on PHYSICS_1 only. The monitoring for trigger in PHYSICS_2 partition from the GUI will be soon implemented. Meanwhile, please use the summary image in the logbook.

13/3/2012: SDDQAshifter Agent crash

The [SDD](#) agent crashes because of a memory problem. This is a well known problem, it will be fixed in the next [AliRoot](#) release.

28/02/2012: HLT DQM plots

Sometimes when amoreGui 2 first opens or the histograms are manually refreshed the DQM plots for the [TRD](#) pop up with the wrong draw option. If one or all of the top three histograms for the [TRD](#) are only in black and white, right click in the plot area of each histogram so that the window "TH2D::<histoName>" appears. Go down to "SetDrawOption" and release the mouse button. In the [TH2D::SetDrawOption](#) box that opens, input "colz" in the blank space. This will set the histogram to have the preferred colored display.

How to train new shifters

- Check out trainers roadmap on the Twiki

<https://twiki.cern.ch/twiki/bin/view/AliceEVE/DQMTraining>

- The trainees will follow you during your shift
- Explain them the basic operations and troubleshooting
- Make sure that they read the Twiki

Questions?



Thank you for your attention...
See you in ARC!

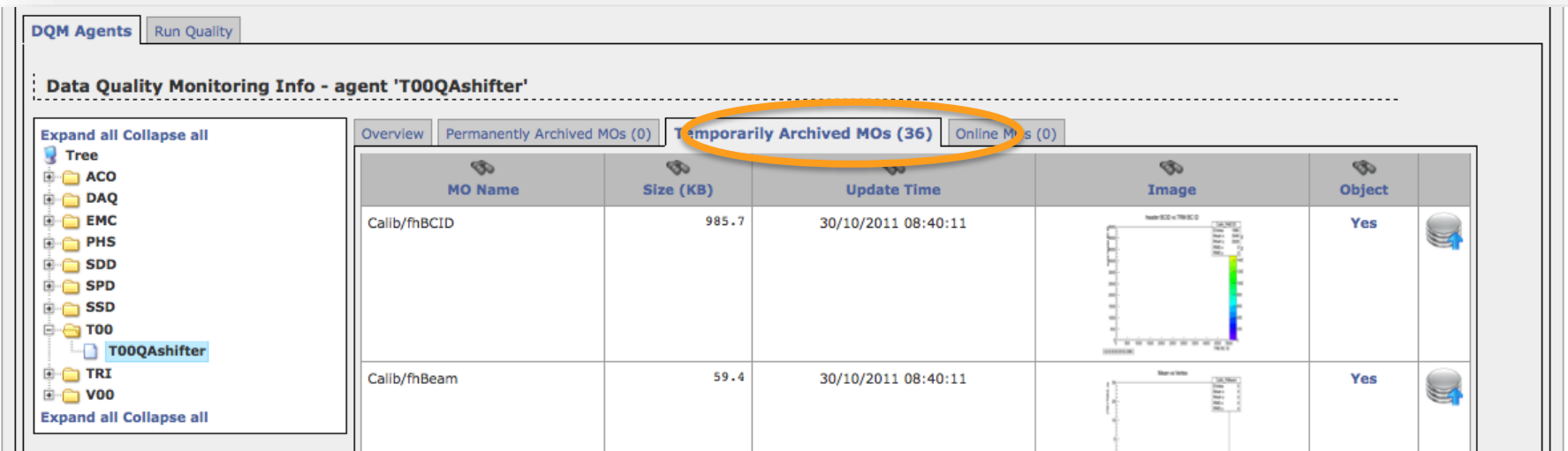
backup

Retrieve and archive monitoring objects

Go to the **DQMInfo > DQM agents** tab

Select the desired detector and agent

Look at Temporarily archived Mos by filtering for the name of the histogram



DQM Agents Run Quality

Data Quality Monitoring Info - agent 'T00QAshifter'

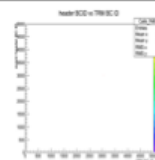

Expand all Collapse all

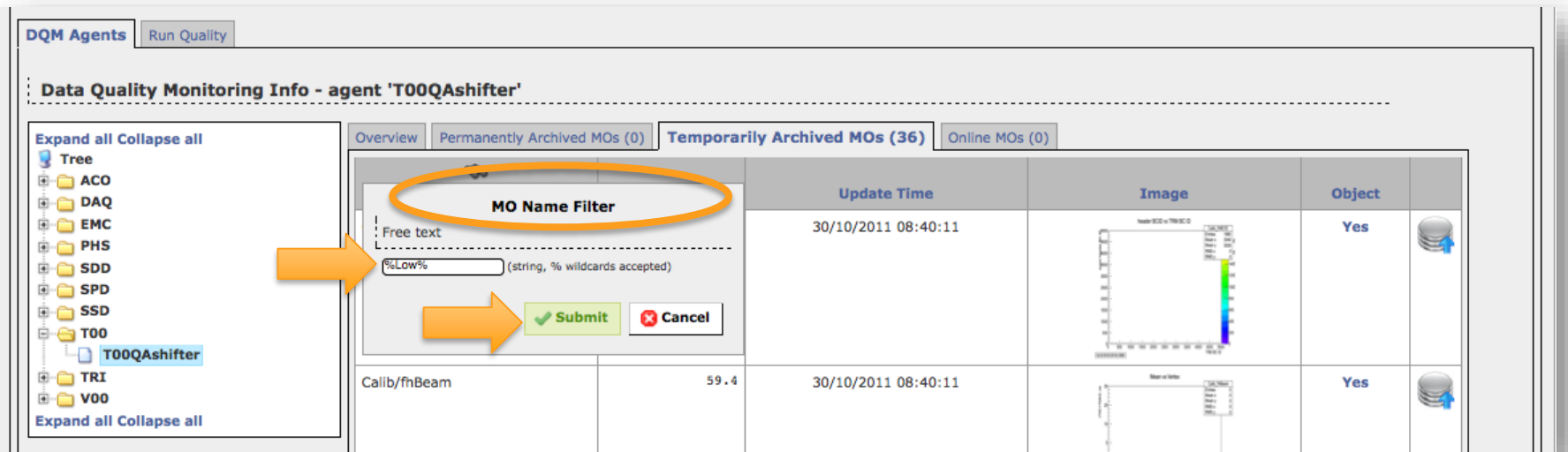
Tree

- ACO
- DAQ
- EMC
- PHS
- SDD
- SPD
- SSD
- T00
 - T00QAshifter
- TRI
- V00

Expand all Collapse all

Overview Permanently Archived MOs (0) **Temporarily Archived MOs (36)** Online MOs (0)

MO Name	Size (KB)	Update Time	Image	Object
Calib/fhBCID	985.7	30/10/2011 08:40:11		Yes
Calib/fhBeam	59.4	30/10/2011 08:40:11		Yes



DQM Agents Run Quality

Data Quality Monitoring Info - agent 'T00QAshifter'

Expand all Collapse all

Tree

- ACO
- DAQ
- EMC
- PHS
- SDD
- SPD
- SSD
- T00
 - T00QAshifter
- TRI
- V00

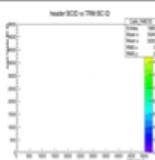
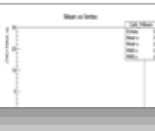
Expand all Collapse all

Overview Permanently Archived MOs (0) **Temporarily Archived MOs (36)** Online MOs (0)

MO Name Filter

Free text

(string, % wildcards accepted)

Update Time	Image	Object
30/10/2011 08:40:11		Yes
30/10/2011 08:40:11		Yes

Retrieve and archive monitoring objects

DQM Agents Run Quality

Data Quality Monitoring Info - agent 'T00Qashifter'

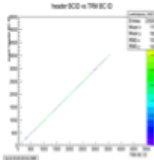

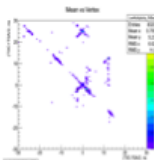



Expand all Collapse all

Tree

- ACO
- DAQ
- EMC
- PHS
- SDD
- SPD
- SSD
- T00
 - T00Qashifter
- TRI
- V00

Expand all Collapse all

Overview Permanently Archived MOs (0) **Temporarily Archived MOs (36)** Online MOs (0)

MO Name	Size (KB)	Update Time	Image	Object
LowMultiplicity/mcBC	985.7	30/10/2011 08:40:11		
LowMultiplicity/fhBeam	59.4	30/10/2011 08:40:11		Yes 
LowMultiplicity/fhCFDeff	1.2	30/10/2011 08:40:11		Yes 

Click on the archive button to archive permanently the desired object

DQM Agents Run Quality

Data Quality Monitoring Info - agent 'T00Qashifter'

Expand all Collapse all

Tree

- ACO
- DAQ
- EMC
- PHS
- SDD
- SPD
- SSD
- T00
 - T00Qashifter
- TRI
- V00

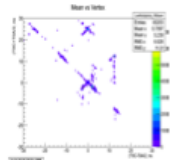
Expand all Collapse all

Overview **Permanently Archived MOs (1)** Temporarily Archived MOs (35) Online MOs (0)

LowMultiplicity/fhBeam

MO Name: LowMultiplicity/fhBeam
Size (KB): 59.4 KB
Update Time: 30/10/2011 08:40:11
Description: No description available

[Download AMORE file](#)



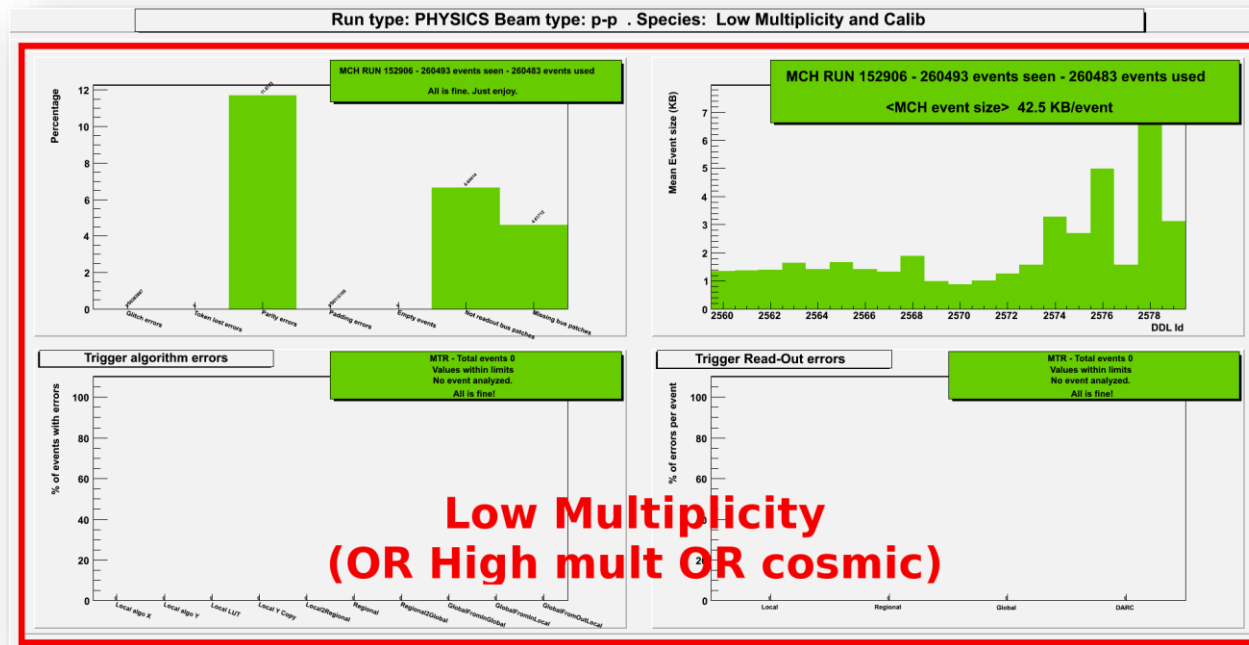
The AMORE file can be downloaded from the Permanently Archived Mos tab

Event species

- **The shifter will inspect plots for the “default” event species**, which is computed online for each event taking into account
 - Run type (calibration, physics, ...)
 - event type (calibration or physics)
 - Beam type (pp, PbPb, cosmics,...)
- Unless specified in the detector’s Twiki, you have to **use the “default” species when refreshing manually the plots**
- The four possible event species are:
 - **Calibration**: calibration events
 - **Cosmic**: filled during cosmic runs
 - **LowMultiplicity**: currently filled in p-p runs
 - **HighMultiplicity**: currently filled in PbPb runs
- Only plots for the currently filled species are saved in the Logbook summary image

Event specie in the logbook summary image

If filling only one event species at the time



Notice that computed event species name appears in the summary image's header

Event specie in the logbook summary image

If filling only two event species at the time

