

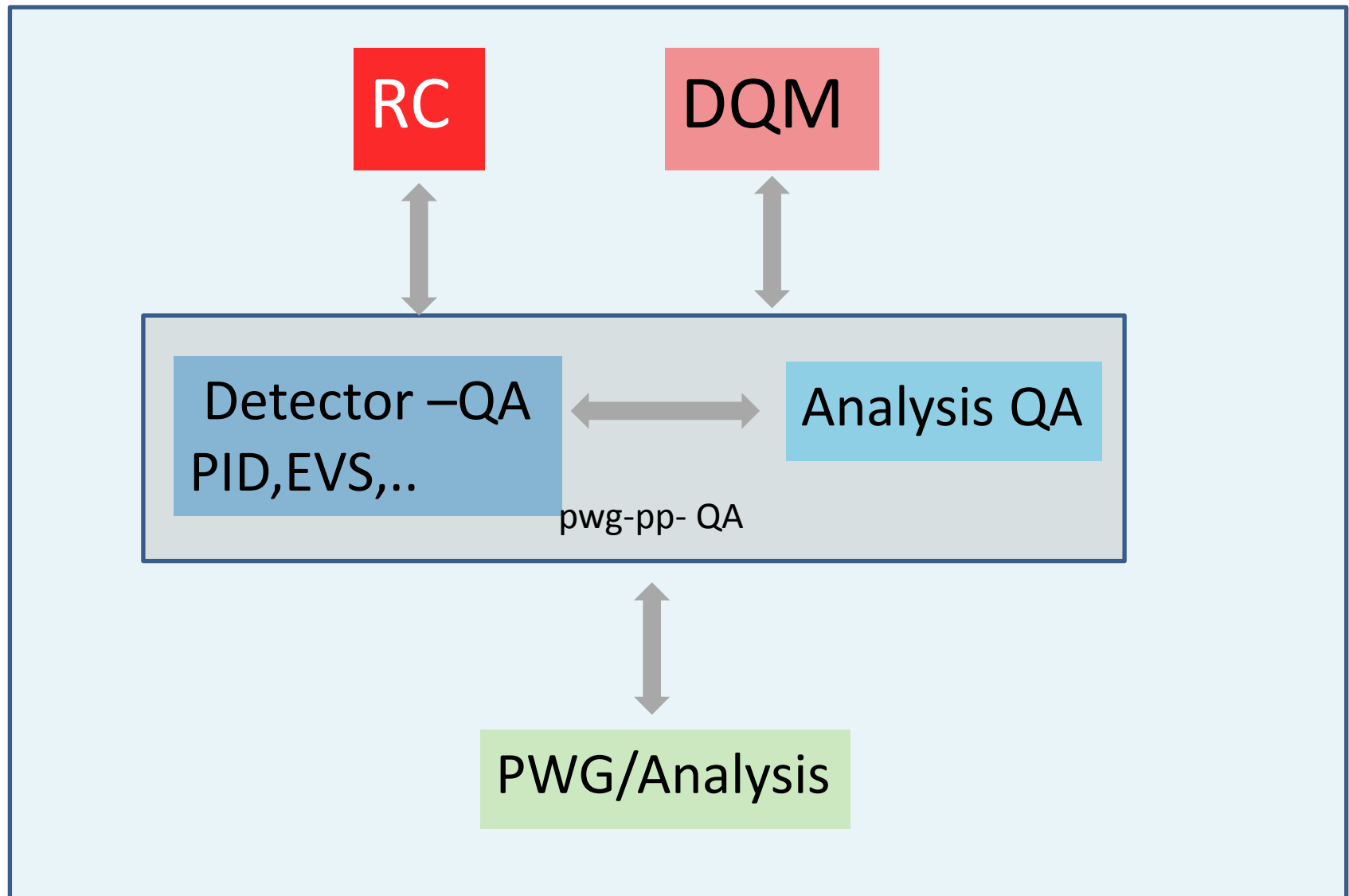
ALICE Quality Assurance

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Alice Offline Week 2016/03/30- 2016/04/01

□ Data Quality Assurance

- Twiki page:
<https://twiki.cern.ch/twiki/bin/view/ALICE/PWGPPQualityAssurance>
- Mailing list: alice-pwg-pp-qa@cern.ch
- Weekly meetings: Tuesday 9AM
<https://indico.cern.ch/category/3942/>
- Jira Component of PWGPP





Positive/Negative

- RC/DQM
- Detector QA operation
 - Database for detector QA (afs central repository)
 - Automatisation of publishing & CERN VM running
 - still some work on logs propagation -> debugging
 - Defined channels of reporting (QA meetings, jira ticket)
- Analysis train Operation
 - All PWGs wagons in place
 - Rely on 1 person to review all outputs
- PWG/Analysis
 - Uses as input the RCT
 - Lack of information & follow-up of observed problems



How to improve ?

□ First outputs of discussions with different actors

- Define channels of communication
- Define central point for accessing all info
....RCT/RC/DQM/QA/Analysis.... (database/ RCT)
- More implication of PWG in QA
- Improve following of each issues
- possibility of centralized QA trains running (not only when reconstruction pass)



RC-DQM/ QA Communication

- ❑ Jira ticket created by RC at beginning of new period:
 - Dedicated JIRA /issue (DQM/QA) under this general period ticket
- ❑ QA meetings
 - Slot dedicated to DQM in QA meetings (when data taking)
 - Regular QA meetings (daily?) at beginning of periods
 - Regular QA presence at RC meeting (daily)
- ❑ More experts involved in DQM/QA
- ❑ More HLT plots/alarms in DQM
- ❑ DQM included in QA mailing lists

□ Proposal for QA/ PWG analysis

- **Central database** needed to correlate information between RCT/logbook/QA.... (use of RCT/RCT twiki as starting)
- PWG should provide a contact person for QA (follows the QA meeting and reports);
- PWG should provide list of analysis to be run as QA
 - Within or not QA train (depending on the different level of implementation)
 - validation is not DPG/QA responsibility.



Central Access point: RCT

Wiki page of LHC150 >

Welcome germain
How to select runs

LHC150		Beam		Bunches										Triggers										Quality Pass 1		Detectors configuration												
Run#	Bunches	Scheme	Fill #	Energy per beam	Intensity per bunch	Mu	B	B	A	B	C	MB Interaction	Rate (Hz)	MB Beam-Empty	MB Empty-Empty	Muon Interaction	High multiplicity trigger	EMCAL	Calibration	Global quality	Muon quality	Physics Selection Status	Comment	A Field	A C	E D	F C	H M	H M	M P	P S	S T	T T	V O	Z D	HLT mode	Last change	
246994	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,720	6,369		0.0005	444	74	72			1,462,567	292.10				587,442					1		1	x	1	x	x	x	x	x					1	3	01 Mar 2016
246991	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,720	6,369		0.0005	444	74	72			379,251	238.67				205,118					1		1	x	x	x	x	x					1	3	01 Mar 2016		
246989	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,720	6,369		0.0007	444	74	72			2,551,035	253.61				1,811,223					1		1	x	x	x	x	x					1	3	01 Mar 2016		
246984	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,720	6,370		0.0011	444	74	72			1,757,655	240.84				1,942,278					1		1	x	x	x	x	x					1	3	01 Mar 2016		
246982	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,720	6,369		0.0014	444	74	72			145,502	174.88				241,254					1		1	x	x	x	x					1	3	01 Mar 2016			
246980	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,720	6,370		0.0015	444	74	72			2,606,351	227.01				3,328,568					1		1	x	x	x	x					1	3	01 Mar 2016			
246949	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,719	6,369		0.0012	444	74	72			785,728	158.60				1,363,854					1		1	x	x	x	x					1	3	01 Mar 2016			
246948	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,719	6,369		0.0014	444	74	72			339,878	222.43				418,744					1		1	x	x	x	x					1	3	01 Mar 2016			
246945	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,719	6,369		0.0015	444	74	72			769,837	242.54				1,031,540					1		1	x	x	x	x					1	3	01 Mar 2016			
246942	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,719	6,370		0.0015	444	74	72			214,557	135.03				499,121					1		1	x	x	x	x					1	3	01 Mar 2016			
246937	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,719	6,369		0.0015	444	74	72			250,626	216.80				340,768					1		1	x	x	x	x					1	3	01 Mar 2016			
246930	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,719	6,370		0.0015	444	74	72			191,958	216.17				271,509					1		1	x	x	x	x					1	3	01 Mar 2016			
246928	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,719	6,370		0.0015	444	74	72			60,987	121.49				124,369					1		1	x	x	x	x					-1	3	01 Mar 2016			
246871	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,717	6,369		0.0008	444	74	72			958,689	282.97				435,217					1		1	x	x	x	x					1	3	01 Mar 2016			
246870	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,717	6,369		0.0008	444	74	72			199,295	284.30				93,539					1		1	x	x	x	x					1	3	01 Mar 2016			
246867	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,717	6,369		0.0009	444	74	72			940,081	255.04				737,571					1		1	x	x	x	x					1	3	01 Mar 2016			
246865	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,717	6,369		0.0010	444	74	72			481,460	259.41				395,328					1		1	x	x	x	x					1	3	01 Mar 2016			
246864	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,717	6,369		0.0012	444	74	72			868,646	170.49				1,216,248					1		1	x	x	x	x					1	3	01 Mar 2016			
246859	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,717	6,369		0.0015	444	74	72			321,959	139.20				604,736					1		1	x	x	x	x					1	3	01 Mar 2016			
246858	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,717	6,369		0.0016	444	74	72			43,628	88.32				106,281					1		1	x	x	x	x					-1	3	01 Mar 2016			
246855	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,717	6,369		0.0015	444	74	72			454,344	232.52				637,728					1		1	x	x	x	x					1	3	01 Mar 2016			
246851	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,717	6,369		0.0015	444	74	72			482,616	247.75				600,846					1		1	x	x	x	x					1	3	01 Mar 2016			
246847	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,717	6,370		0.0015	444	74	72			678,239	232.11				832,934					1		1	x	x	x	x					1	3	01 Mar 2016			
246846	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,717	6,369		0.0015	444	74	72			284,948	202.38				437,727					1		1	x	x	x	x					1	3	01 Mar 2016			
246845	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,717	6,370		0.0015	444	74	72			481,091	199.95				722,119					1		1	x	x	x	x					1	3	01 Mar 2016			
246844	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,717	6,369		0.0015	444	74	72			307,216	225.89				370,095					1		1	x	x	x	x					1	3	01 Mar 2016			
246810	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,715	6,369		0.0007	444	74	72			156,535	254.12				103,024					1		1	x	x	x	x					1	3	01 Mar 2016			
246809	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,715	6,369		0.0009	444	74	72			1,746,198	295.27				1,208,094					1		1	x	x	x	x					1	3	01 Mar 2016			
246808	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,715	6,370		0.0010	444	74	72			70,123	103.89				149,135					1		1	x	x	x	x					1	3	01 Mar 2016			
246807	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,715	6,370		0.0012	444	74	72			1,228,481	267.18				1,255,578					1		1	x	x	x	x					1	3	01 Mar 2016			
246806	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,715	6,369		0.0015	444	74	72			1,001,876	261.86				1,240,731					1		1	x	x	x	x					1	3	01 Mar 2016			
246805	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,715	6,370		0.0015	444	74	72			1,195,639	250.71				1,560,154					1		1	x	x	x	x					1	3	01 Mar 2016			
246804	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,715	6,370		0.0014	444	74	72			495,799	287.75				495,349					1		1	x	x	x	x					1	3	01 Mar 2016			
246766	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,714	6,370		0.0007	444	74	72			109,696	272.88				58,157					1		1	x	x	x	x					-1	3	01 Mar 2016			
2467																						1		1	x	x	x	x					1	3	01 Mar 2016			
2467																						1		1	x	x	x	x					1	3	01 Mar 2016			
2467																						1		1	x	x	x	x					1	3	01 Mar 2016			

RCT is the base of run selection for physics Analysis

Should be filled by All detectors

- pass dependant

new feature: default is Orange: ("no feedback provided yet")

Global Quality: Good = TPC + V0 + ITS OK



ALICE

Central Acces point: RCT twiki



MonALISA Repository for ALICE

My jobs | My home dir | Catalogue browser | LEGO Trains | Administration Section | ALICE Reports | Alert XML Feed | Firefox Toolbar | MonaLisa G

- ALICE Repository
 - ALICE Repository
 - Google Map
 - Shifter's dashboard
 - Run Condition Table
 - Production Overview
 - Production info
 - Run view
 - RAW production cycles
 - RAW activities
 - LEGO trains
 - Analysis train
 - MC production cycles
 - MC production requests
 - Job Information
 - SE Information
 - Services
 - Network Traffic

Twiki page of LHC150 »

Run Condition Table

LHC150		Beam					Bunches				Triggers							Qu	
Run#	Bunches	Scheme	Fill #	Energy per beam	Intensity per bunch	Mu	B B	A A	B C	MB Interaction	Rate (Hz)	MB Beam-Empty	MB Empty-Empty	Muon Interaction	High multiplicity trigger	EMCAL	Calibration	Global quality	Muon quality
246994	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,720	6,369	0.0005	444	74	72	1,462,567	292.10				587,442					1
246991	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,720	6,369	0.0005	444	74	72	379,251	238.67				205,118					1
246989	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,720	6,369	0.0007	444	74	72	2,551,035	253.61				1,811,223					1
246984	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,720	6,370	0.0011	444	74	72	1,757,655	240.84				1,942,278					1
246982	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,720	6,369	0.0014	444	74	72	145,502	174.88				241,254					1
246980	268	100_150ns_518Pb_516Pb_492_444_24_22inj	4,720	6,370	0.0015	444	74	72	2,606,351	227.01				3,328,568					1

Further detail on QA should be centralized manual creation with template

Should be static summarized information

- Run Condition
- DQM summary -> links to the appropriate jira
- QA summary /detector + links to jira
- PWG QA summary (link to runlists?)
- ...



Browser navigation bar showing the URL <https://twiki.cern.ch/twiki/bin/view/ALICE/RctLHC15o> and search bar with 'Rechercher'.

Left sidebar navigation menu:

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TWiki > ALICE Web > WebPreferences > RCT > RctLHC15o (2016-03-29, MarieGermain)

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Data analysis notes for LHC15o Pb Pb

Known detector problems/states

The MB trigger was changed a bit about halfway through the run to reject more of the electromagnetic events. The new trigger is: **0V0L**, which requires an online VOM >= 20, CV0L7-B-NOPF-CENT trigger introduced since **run 246086**.

DQM Summary:

QA ticket:

cpass1_pass1 & muon_calor_pass1: <https://alice.its.cern.ch/jira/browse/PWGPP-178>

QA summaries and repositories:

[AD](#)

[ITS](#)

[TPC](#)

[TOF](#)

Blue sidebar menu:

- ↓ [Data analysis notes for LHC15o Pb Pb](#)
 - ↓ [Known detector problems/states](#)
- ↓ [DQM Summary:](#)
- ↓ [QA ticket:](#)
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 - ↓ [TPC](#)
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 - ↓ [PMD](#)
 - ↓ [FMD](#)
 - ↓ [MUON](#)
 - ↓ [ZDC](#)
 - ↓ [T0](#)
 - ↓ [V0](#)
 - ↓ [Event Selection](#)
- ↓ [PWGs](#)



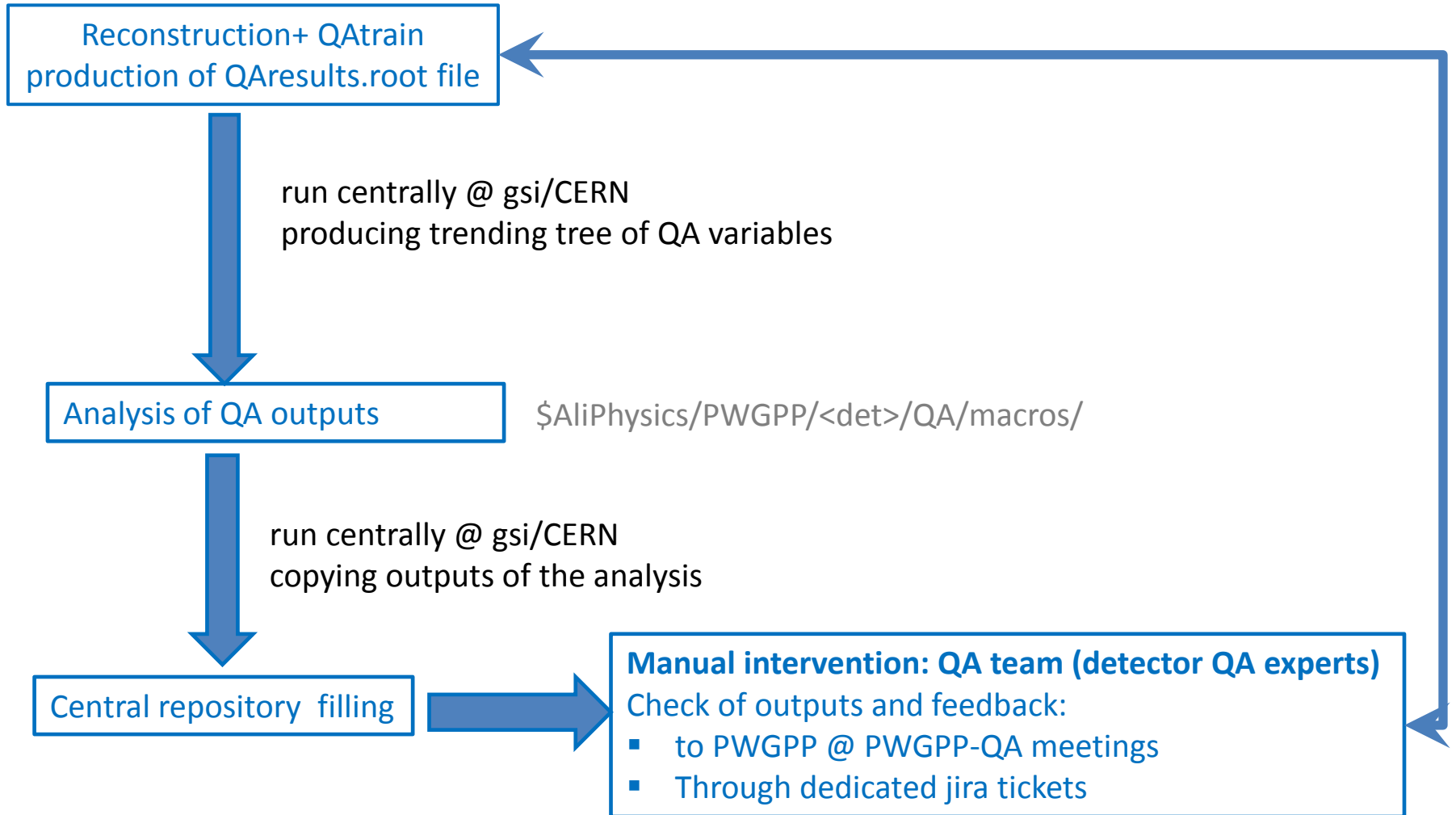
□ Alice QA

- improve communication with Point2/RC/DQM
 - some organisation in place
- Include Analysis and PWG in QA
 - definition of tools ongoing (few feedback from PWGs)
 - Common observable PID, Tracking, Event selection in automatic procedure WITH central repository
 - existing for most of them
 - Need a PWG QA contact
 - with specific tasks following computing boardreporting to QA meetings
 - Following MC productions
- Need of seniors investment in QA (not only service tasks)

backup



Detector QA operation

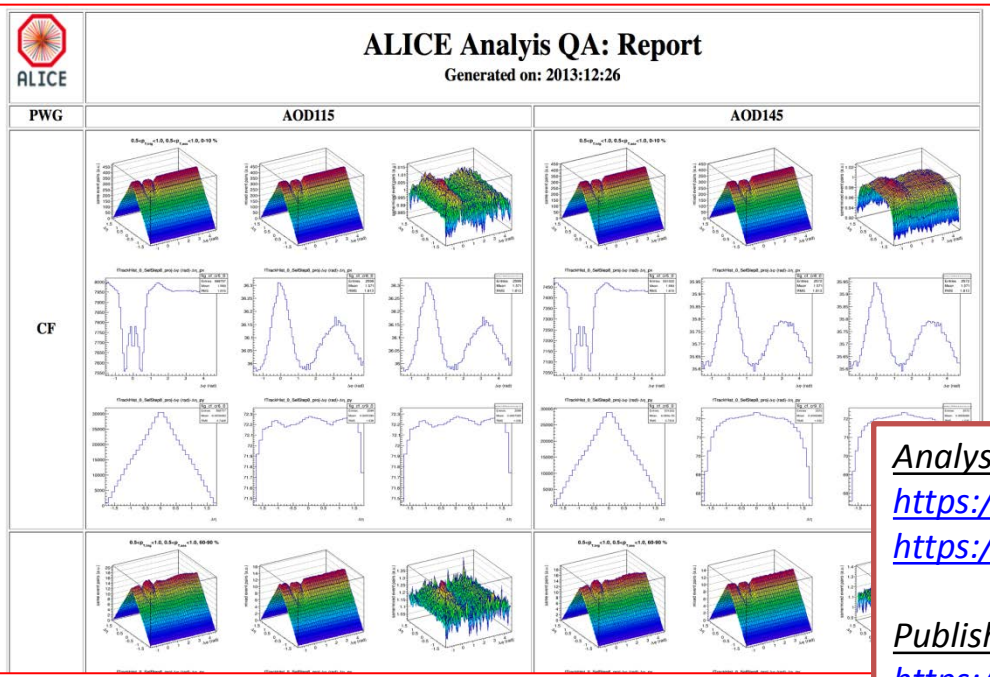




ALICE

Analysis QA operation

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



Analysis Trains:
https://alimonitor.cern.ch/trains/train.jsp?train_id=70
https://alimonitor.cern.ch/trains/train.jsp?train_id=69

Publishes Results in a AFS based web interface at:
<https://alice-analysisqa.web.cern.ch/alice-analysisqa>

Technical detail and PDF results are kept at our twiki:
<https://twiki.cern.ch/twiki/bin/viewauth/ALICE/AnalysisQA>

Dedicated Mailing list: alice-analysis-qa@cern.ch

Issue tracking: Tracked via JIRA tickets per PWG under PWGPP in **Analysis-QA** component