

# CSC Shifter Training

## DQM Display and Run Evaluation

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Fred Borcharding

*24-03-2010 Under Development*

Reach from CSCOperations Twiki page or directly:

<https://cms-emu-slicetest.web.cern.ch/cms-emu-slicetest/904/Procedures/ShifterTraining-RunRegistry.pdf>

# CSC Shifter Run Evaluation

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    - needed
- The CSC Shifter uses the CSC Run Registry – RR – and CSC local DQM to evaluate each Global Run
  - This document outlines how this is to be done
  - The most current procedures are in the CSCOperations Twiki page
    - Procedures in that document supersede any presented in this document
    - **When they are different follow the Twiki !!**

# Logging On

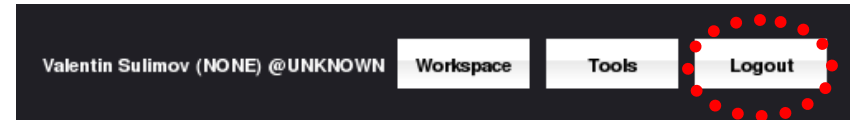
- URL
- Open the RR web page with the Firefox browser at the shift station
- The RR will come up in Global view / workspace


Run Number	Group	Events	Rate, Hz	Run Started	Run Duration	LS	State	Dataset	Shifter	Comment	CASTOR	CSC	DT	ECAL	ES	HCAL	HLT	LIT	Pixel	RPC	SISrip	EGamma	JMet	Muon	Track
131881	Beam Commissioning10	10734030	933.785	Wed 24-03-10 04:42:00	00:03:13.34	0	SIGNOFF	/GlobalOnline/ALL	Georgios Anagnostou		EXCL	EXCL	EXCL	GOOD	GOOD	GOOD	GOOD	GOOD	EXCL	EXCL	EXCL				
131876	Beam Commissioning10	37471943	1977.407	Tue 23-03-10 23:03:00	00:05:19.00	0	SIGNOFF	/GlobalOnline/ALL	Georgios Anagnostou		EXCL	EXCL	EXCL	GOOD	GOOD	GOOD	GOOD	GOOD	EXCL	EXCL	EXCL				
131869	Commissioning10	9629098	1684.557	Tue 23-03-10 00:00:00	00:01:36.23	0	SIGNOFF	/StreamExpress /Commissioning10- Express-v5/DQM	Eric Charles Brownson		GOOD	GOOD	EXCL	GOOD	GOOD	BAD!	BAD!	BAD!	EXCL	EXCL	EXCL	BAD!	BAD!	BAD!	BAD!

<https://pccmsdqm04.cern.ch/runregistry/index.iface>

# Log in


- Login
  - Use your NICE ID/pwd
  - Each shifter can log on at the shift console by default
  - Each shifter cannot log on via their laptop
  - Logout the previous shifter before you begin working with the RR




**CMS DQM Run Registry (Global)**

[2010-03-11 07:35:32.0]Iaria.Segoni(EXPERT,ADMIN)@PC  
Updated Online INstructions for assigning Group name, see: [https://twiki.cern.ch/twiki/bin/view/CMS/OnlineDQMShifts#Carefully\\_assign\\_the\\_group\\_name](https://twiki.cern.ch/twiki/bin/view/CMS/OnlineDQMShifts#Carefully_assign_the_group_name)

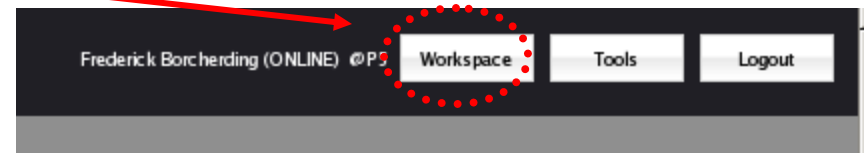
Valentin Sulimov (NONE) @UNKNOWN    Workspace    Tools    **Logout**


Runs        RunInfo    Refresh    Table    LumSec    5,819 Items. Show 20 from 1 to 20. Page 1 / 291    Page: 1    Size: 20

Run Number	Group	Events	Rate, Hz	Run Started	Run Duration	LS	State	Dataset	Shifter	Comment	CASTOR	CSC	DT	ECAL	ES	HCAL	HLT	LIT	Pixel	RPC	SISrip	EGamma	JMet	Muon	Track
131881	BeamCommissioning10	10734030	933.785	Wed 24-03-10 04:42:00	00:03:13:34	0	SIGNOFF	/Global/Online/ALL	Georgios Anagnostou		EXCL	EXCL	EXCL	GOOD	GOOD	GOOD	GOOD	GOOD	EXCL	EXCL	EXCL				
131876	BeamCommissioning10	37471943	1977.407	Tue 23-03-10 23:03:00	00:05:19:00	0	SIGNOFF	/Global/Online/ALL	Georgios Anagnostou		EXCL	EXCL	EXCL	GOOD	GOOD	GOOD	GOOD	GOOD	EXCL	EXCL	EXCL				
131869	Commissioning10	9623068	1684.557	Tue 23-03-10	00:01:36:23	0	SIGNOFF	/StreamExpress /Commissioning10- Express-v5/DQM	Eric Charles Brownson		GOOD	GOOD	EXCL	GOOD	GOOD	BAD!	BAD!	BAD!	EXCL	EXCL	EXCL	BAD!	BAD!	BAD!	BAD!

# Pick Workspace

- Click on 'Workspace'
- From drop down menu – Pick 'CSC'




**CMS DQM Run Registry (Global)**

[2010-03-11 07:35:32.0] Iaria Segoni(EXPERT,ADMIN)@PC  
Updated Online INstructions for assigning Group name, see: [https://twiki.cern.ch/twiki/bin/view/CMS/OnlineDQMShifts#Carefully\\_assign\\_the\\_group\\_name](https://twiki.cern.ch/twiki/bin/view/CMS/OnlineDQMShifts#Carefully_assign_the_group_name)

Valentin Sulimov (NONE) @UNKNOWN
Workspace
Tools
Logout

Runs
RunInfo
Refresh
Table
LumSec


5,819 Items. Show 20 from 1 to 20. Page 1 / 291

Run Number	Group	Events	Rate, Hz	Run Started	Run Duration	LS	State	Dataset	Shifter	Comment	CASTOR	CSC	DT	ECAL	ES	HCAL	HLT	LIT	Pixel	RPC	SISrip	EGamma	JMet	Muon	Track
131881	BeamCommissioning10	10734030	933.785	Wed 24-03-10 04:42:00	00:03:13:34	0	SIGNOFF	/Global/Online/ALL	Georgios Anagnostou		EXCL	EXCL	EXCL	GOOD	GOOD	GOOD	GOOD	GOOD	EXCL	EXCL	EXCL				
131876	BeamCommissioning10	37471943	1977.407	Tue 23-03-10 23:03:00	00:05:19:00	0	SIGNOFF	/Global/Online/ALL	Georgios Anagnostou		EXCL	EXCL	EXCL	GOOD	GOOD	GOOD	GOOD	GOOD	EXCL	EXCL	EXCL				
131869	Commissioning10	9623098	1684.557	Tue 23-03-10	00:01:36:23	0	SIGNOFF	/StreamExpress /Commissioning10- Express-v5/DQM	Eric Charles Brownson		GOOD	GOOD	EXCL	GOOD	GOOD	BAD!	BAD!	BAD!	EXCL	EXCL	EXCL	BAD!	BAD!	BAD!	BAD!

# Live Mode

- Click on 'Tools'
  - Pick 'Live Mode'




**CMS DQM Run Registry (Global)**

 [2010-03-11 07:35:32.0]lbrta: Segoni(EXPERT\_ADMIN)@PC  
 Updated Online INstructions for assigning Group name, see: [https://twiki.cern.ch/twiki/bin/view/CMS/OnlineDQMShifts#Carefully\\_assign\\_the\\_group\\_name](https://twiki.cern.ch/twiki/bin/view/CMS/OnlineDQMShifts#Carefully_assign_the_group_name)

Valentin Sulimov (NONE) @UNKNOWN
 Workspace
Tools
Logout

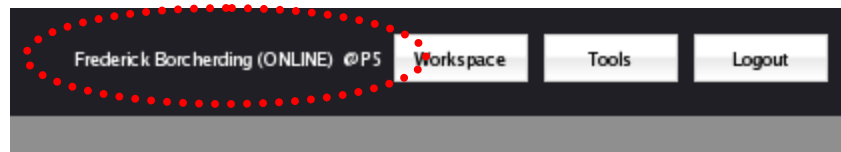
Runs
RunInfo
Refresh
Table
LumISec

 5,819 items. Show 20 from 1 to 20. Page 1 / 291
 Page: 1
Size: 20

Run Number	Group	Events	Rate, Hz	Run Started	Run Duration	LS	State	Dataset	Shifter	Comment	CASTOR	CSC	DT	ECAL	ES	HCAL	HLT	LIT	Pixel	RPC	SIStrip	EGamma	JMet	Muon	Track
131881	BeamCommissioning10	10734030	933.785	Wed 24-03-10 04:42:00	00:03:13:34	0	SIGNOFF	/Global/Online/ALL	Georgios Anagnostou		EXCL	EXCL	EXCL	GOOD	GOOD	GOOD	GOOD	GOOD	EXCL	EXCL	EXCL				
131876	BeamCommissioning10	37471943	1977.407	Tue 23-03-10 23:03:00	00:05:19:00	0	SIGNOFF	/Global/Online/ALL	Georgios Anagnostou		EXCL	EXCL	EXCL	GOOD	GOOD	GOOD	GOOD	GOOD	EXCL	EXCL	EXCL				
131869	Commissioning10	9629098	1684.557	Tue 23-03-10	00:01:36:23	0	SIGNOFF	/StreamExpress /Commissioning10- Express-v5/DQM	Eric Charles Brownson		GOOD	GOOD	EXCL	GOOD	GOOD	BAD	BAD	BAD	EXCL	EXCL	EXCL	BAD	BAD	BAD	BAD

# Banner

- Banner shows
  - Your ID
  - Your privileges
  - Your location



Runs	Refresh	Filter	Runinfo	Data	Frederick Borcherding (ONLINE) @P5 Workspace Tools Logout																						
Number	Group	Events	Rate, Hz	Started	Duration	State	Dataset	Shifter	Comment	ME-1/1	ME-1/2	ME-1/3	ME-2/1	ME-2/2	ME-3/1	ME-3/2	ME-4/1	ME+1/1	ME+1/2	ME+1/3	ME+2/1	ME+2/2	ME+3/1	ME+3/2	ME+4/1	ME+4/2	
127108	MWGR	149,093,922	71,302.443	Wed 10-02-10 06:29:00	35:00	OPEN	Global/Online/ALL	Frederick	ME1/1 have low stats	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!
127161	MWGR	97,632,382	73,727.182	Wed 10-02-10 07:31:00	23:00	OPEN	Global/Online/ALL	Frederick	LLAs: 998-42479 (401581 physics, 132466)	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!
127155	MWGR	1,716,128,316	79,232.094	Tue 09-02-10 23:53:00	06:03:00	OPEN	Global/Online/ALL	Frederick	111e-1718749674 (00407047 sbectra 7150R1)	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!
127096	MWGR	1,785,430	1,009.983	Tue 09-02-10 13:34:00	35:00	SIGNOFF	Global/Online/ALL	Frederick	CR - 70Hz CSC No Problems	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!
126984	MWGR	2,573,050	810.21	Mon 08-02-10 14:33:00	54:00	SIGNOFF	Global/Online/ALL	Frederick	First Global run of 2010 CR running	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!
125955	MWGR	2,100,000	1,200	Thu 28-01-10 21:57:00	49:00	SIGNOFF	Global/Online/ALL	Gregory Raless		GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!
123075	Test	9,664,894	1,743.398	Mon 30-11-09 11:08:00	01:35:00	SIGNOFF	Global/Online/ALL	Valdas	<a href="https://cmsdqm04.cern.ch/runregistry/">https://cmsdqm04.cern.ch/runregistry/</a>	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET

# CSC RR Page

- NOE: you must register all new runs from this page

- This is the CSC RR Page
- It shows the runs registered
- It shows the grading for each run
  - Passing the cursor over any of these boxes will open a small panel with any comments that were included

CMS DQM Run Registry (CSC)

Frederick Borchering (ONLINE) @ P5 Workspace Tools Logout

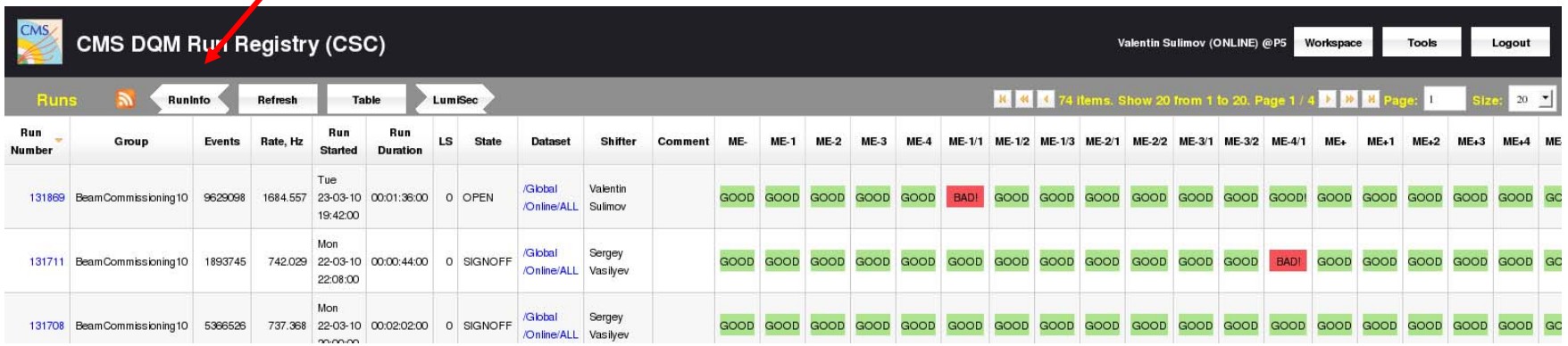
Runs Refresh Filter Table Data 43 items, Show 20 from 1 Page 1 / 3 Jump to: 1 Page size: 20


Number	Group	Events	Rate, Hz	Started	Duration	LS	State	Dataset	Shifter	Comment	CSC	CSC TF	DOUs	ME-1/1	ME-1/2	ME-1/3	ME-2/1	ME-2/2	ME-2/3	ME-3/1	ME-3/2	ME-3/3	ME+1/1	ME+1/2	ME+1/3	ME+2/1	ME+2/2	ME+2/3	ME+3/1	ME+3/2	ME+3/3	ME+4/1	ME+4/2	
130048	Global	27,886,701	879.625	Thu 04-03-10 22:40:00	08:47:00	0	OPEN	/Global/Online/ALL	Frederick	GOOD RUN	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	
129886	Global	14,563,680	1,534.708	Wed 03-03-10 19:36:00	02:38:56	0	SIGNOFF	/Global/Online/ALL	Valdas Rapsevicius		GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD
129489	Global	40,482,630	1,291.645	Sun 28-02-10 23:16:00	09:17:00	0	SIGNOFF	/Global/Online/ALL	Chaouki		GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD
129428	Global	243	1.25	Sat 27-02-10 12:58:00	05:00	0	SIGNOFF	/Global/Online/ALL	Victor Pereelygin	Short Run, Cosmics, B=0 CSC TF key	GOOD	GOOD	BAD!	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	
129425	Global	66,892,442	31,920.763	Sat 27-02-10 11:40:00	36:00	0	SIGNOFF	/Global/Online/ALL	Victor Pereelygin	Short Run, Cosmics, B=0T, Starting	GOOD	GOOD	BAD!	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	
129419	Global	3,696,015	1,213.448	Sat 27-02-10 09:08:00	48:00	0	SIGNOFF	/Global/Online/ALL	Victor Pereelygin	Short Run, Cosmics B=0T	GOOD	GOOD	BAD!	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	
129414	Global	35,125,218	1,428.983	Sat 27-02-10 01:41:00	06:51:12	0	SIGNOFF	/Global/Online/ALL	James William Dolan	BAD Run - 2 DOUs with critical	GOOD	GOOD	BAD!	GOOD!	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	



# Registering a Global Run

- Click on the 'Run Info' button on left top from the listing of CSC Registered Runs
- **NOTE – You must start from this page, that is from the CSC workspace, to get the correct drop down menu later**
- A listing of ALL the runs taken will open
- From that page
  - Click on the Run # desired to open drop down menu
  - In drop down menu pick
    - 'Create Global' to register a Global run
    - 'Create Local' to register a local run
    - If you get none of these options go back to top




**CMS DQM Run Registry (CSC)**
Valentin Sulimov (ONLINE) @P5

Runs
RunInfo
Refresh
Table
LumISec
74 Items. Show 20 from 1 to 20. Page 1 / 4
Page: 1
Size: 20

Run Number	Group	Events	Rate, Hz	Run Started	Run Duration	LS	State	Dataset	Shifter	Comment	ME-	ME-1	ME-2	ME-3	ME-4	ME-1/1	ME-1/2	ME-1/3	ME-2/1	ME-2/2	ME-3/1	ME-3/2	ME-4/1	ME+	ME+1	ME+2	ME+3	ME+4	ME
131869	BeamCommissioning10	9629098	1684.557	Tue 23-03-10 19:42:00	00:01:36:00	0	OPEN	/Global /Online/ALL	Valentin Sulimov		GOOD	GOOD	GOOD	GOOD	GOOD	BAD!	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD!	GOOD	GOOD	GOOD	GOOD	GOOD	GC
131711	BeamCommissioning10	1893745	742.029	Mon 22-03-10 22:08:00	00:00:44:00	0	SIGNOFF	/Global /Online/ALL	Sergey Vasilyev		GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	BAD!	GOOD	GOOD	GOOD	GOOD	GOOD	GC
131708	BeamCommissioning10	5366526	737.368	Mon 22-03-10 22:08:00	00:02:02:00	0	SIGNOFF	/Global /Online/ALL	Sergey Vasilyev		GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GC



# DQM Display

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# Setting Up DQM for RR

- NOTE – The light grey are filtered out errors
  - The blue are the same as for the reference run
  - The Hot Pink are KNOWN PROBLEMS

- To set up the DQM display for RR entries
  - Select proper ‘Compare to’ run
  - Select ‘DDUs comparison’
  - Select ‘Show Known Problems’
  - Set ‘Problem Severity Filter: “CRITICAL”’

The screenshot shows the DQM interface with the following settings:

- Compare to: online\_00128893
- DDUs Comparison:
- Show Known Problems:
- Problem Severity Filter: CRITICAL

The EMU Summary table displays DDU counts for various ME+ and ME- entries across 31 channels. The table uses color coding: light grey for filtered errors, blue for reference run matches, and hot pink for known problems. For example, ME-2/1/02 shows a hot pink '2' in channel 2.

The Report Status table compares the current run (online\_00128899) to the reference run (online\_00128893) for ME-2/1/02:

Run online_00128899 Status for ME-2/1/02	Known as	Compared to Run online_00128893
CRITICAL [?] DMB-Input FIFO Full: 2577 events (100.000%)		CRITICAL DMB-Input FIFO Full: 72 events (100.0)
CRITICAL [?] DMB-Input FIFO Full: ALCT_FIFO_FULL 2577 events (0.100%)		CRITICAL DMB-Input FIFO Full: ALCT_FIFO_FUL
CRITICAL [?] No ALCT Data: 100.0%		CRITICAL No ALCT Data: 100.0%
CRITICAL [?] No CLCT Data: 100.0%		CRITICAL No CLCT Data: 100.0%

Plots: online\_00128899/CSC\_043\_01/CFEB/CFEB\_SCA\_Active\_Strips\_Occupancy.png

# Action

- NOTE – The example ME-2/1/02 is BLUE because it has the exact same problems as for the reference run. Since the display is filtered we see only the CRITICAL chambers

- These ‘CRITICAL’ CSC problems are not a ‘Known Problem’
  - Enter the problem’s messages into the RR

**Control Panel:**

- Compare to: online\_00128893
- DDUs Comparison:
- Show Known Problems:
- Problem Severity Filter: CRITICAL
- Compare selected Run DQM Results to other Runs

**EMU Summary Grid:**

DDUs	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ME+4/2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ME+4/1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ME+2/2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ME+2/1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ME+1/3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ME+1/2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ME+1/1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ME-1/1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ME-1/2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ME-1/3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ME-2/1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ME-2/2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ME-3/1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ME-3/2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ME-4/1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ME-4/2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

**Severity Legend:** LOW STAT MINOR TOLERABLE SEVERE CRITICAL REPEATING PROBLEM KNOWN PROBLEM NO DATA FILTERED

**Report Status:**

Run online_00128899 Status for ME-2/1/02	Known as	Compared to Run online_00128893
CRITICAL [?] DMB-Input FIFO Full: 2577 events (100.000%)		CRITICAL DMB-Input FIFO Full: 72 events (100.0)
CRITICAL [?] DMB-Input FIFO Full: ALCT_FIFO_FULL 2577 events (0.100%)		CRITICAL DMB-Input FIFO Full: ALCT_FIFO_FUL
CRITICAL [?] No ALCT Data: 100.0%		CRITICAL No ALCT Data: 100.0%
CRITICAL [?] No CLCT Data: 100.0%		CRITICAL No CLCT Data: 100.0%

Plots: online\_00128899/CSC\_043\_01/CFEB/CFEB\_SCA\_Active\_Strips\_Occupancy.png

# Action (cont.)

- These 'CRITICAL' CSC problems are the same as for the reference run
  - Do not enter into the ELOG
  - If these CRITICAL problems were new for this run it should be entered into the ELOG

The screenshot displays the EMU Summary interface. On the left, the control panel shows the comparison between 'online\_00128899' and 'online\_00128893'. The 'Problem Severity Filter' is set to 'CRITICAL'. A tooltip indicates 'Compare selected Run DQM Results to other Runs'. The main area is a grid of DDU data for various ME+ and ME- modules, with columns representing DDU indices 1-31. A 'Severity legend' at the bottom identifies colors: LOW (white), STAT (light blue), MINOR (yellow), TOLERABLE (orange), SEVERE (red), CRITICAL (dark red), REPEATING PROBLEM (purple), KNOWN PROBLEM (pink), and NO DATA (grey). Below the legend is a 'Report Status' table comparing the two runs for ME-2/1/02.

Run online_00128899	Status for ME-2/1/02	Known as	Compared to Run online_00128893
CRITICAL	[?] DMB-Input FIFO Full: 2577 events (100.000%)		CRITICAL DMB-Input FIFO Full: 72 events (100.000%)
CRITICAL	[?] DMB-Input FIFO Full: ALCT_FIFO_FULL 2577 events (0.100%)		CRITICAL DMB-Input FIFO Full: ALCT_FIFO_FULL 2577 events (0.100%)
CRITICAL	[?] No ALCT Data: 100.0%		CRITICAL No ALCT Data: 100.0%
CRITICAL	[?] No CLCT Data: 100.0%		CRITICAL No CLCT Data: 100.0%

Plots: online\_00128899/CSC\_043\_01/CFEB/CFEB\_SCA\_Active\_Strips\_Occupancy.png

# III Text from DQM Display to RR

- Click on DDU or CSC to open 'Report Status'
- Run cursor over text to highlight
- Copy with a right click

System View  
 CSC Table VME/DMB Table DDU/CSC Map CSC Counters Summary Report

Run: 127338

EMU Summary

DDUs	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
ME+ ME+4/2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
ME+ ME+4/1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
ME+ ME+3/2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
ME+ ME+3/1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
ME+ ME+2/2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
ME+ ME+1/2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
ME+ ME+1/1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
ME- ME-1/1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
ME- ME-1/2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
ME- ME-1/3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
ME- ME-2/1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
ME- ME-2/2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
ME- ME-3/1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
ME- ME-3/2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
ME- ME-4/1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
ME- ME-4/2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36

Severity legend: LOW\_STAT MINOR TOLERABLE SEVERE CRITICAL KNOWN\_PROBLEMS NO\_DATA

Report Status

Run online\_00127338 Status for DDU\_03 Compared to Run noref

SEVERE [?] DDU Trailer Error Status: 129257 events, (56.941159%)

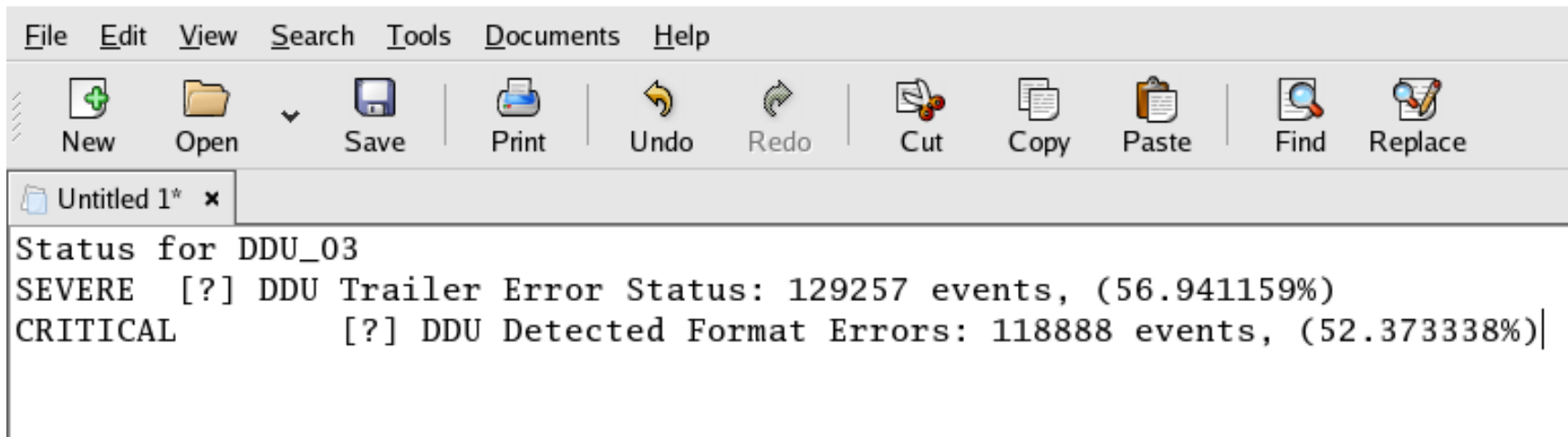
CRITICAL [?] DDU Detected Format Errors: 118888 events, (52.373338%)

TOLERABLE [?] DDU Input #13: detected ERROR state

Plots

# III Text from DQM Display to RR

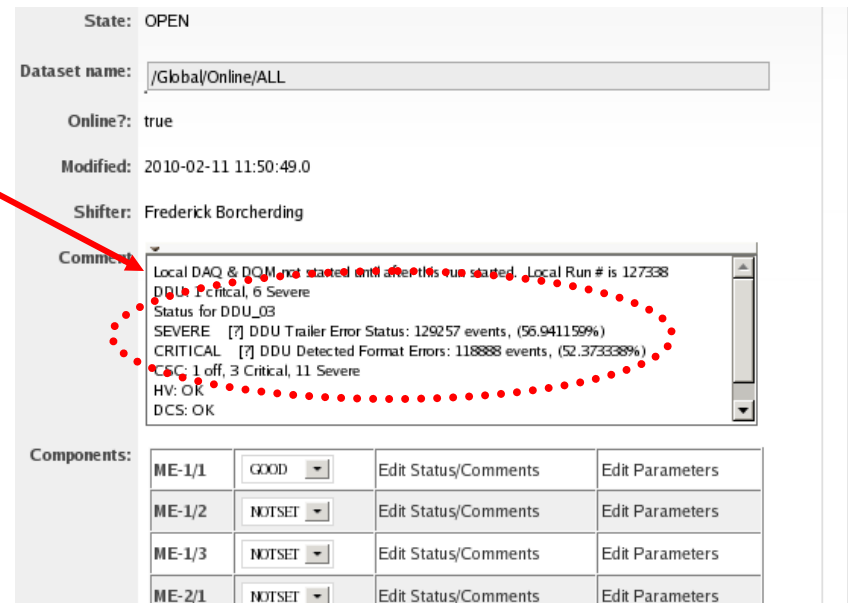
- After a copy from the DQM display page
  - <ctr>v to paste into a text editor file
- Copy from this file into the RR comment box
  - This step is needed to convert the text from HTM format to ASCII format



```
File Edit View Search Tools Documents Help
New Open Save Print Undo Redo Cut Copy Paste Find Replace
Untitled 1* x
Status for DDU_03
SEVERE [?] DDU Trailer Error Status: 129257 events, (56.941159%)
CRITICAL [?] DDU Detected Format Errors: 11888 events, (52.373338%)
```

# III Text from DQM Display to RR

- Paste ASCII text into 'Comment' window with <ctr>v



State: OPEN

Dataset name: /Global/Online/ALL

Online?: true

Modified: 2010-02-11 11:50:49.0

Shifter: Frederick Borcherding

Comment: Local DAQ & DQM was started and the PUS was started. Local Run # is 127338  
DDU: Critical, 6 Severe  
Status for DDU\_03  
SEVERE [?] DDU Trailer Error Status: 129257 events, (56.941159%)  
CRITICAL [?] DDU Detected Format Errors: 118888 events, (52.373388%)  
CSC: 1 off, 3 Critical, 11 Severe  
HV: OK  
DCS: OK

Components:

ME-1/1	GOOD	Edit Status/Comments	Edit Parameters
ME-1/2	NOTSET	Edit Status/Comments	Edit Parameters
ME-1/3	NOTSET	Edit Status/Comments	Edit Parameters
ME-2/1	NOTSET	Edit Status/Comments	Edit Parameters



# Edit Run

- NOTE: When you register a new run the Edit View automatically opens. You can also edit a run that has been registered.

- View after adding a Global run
- Note that standard Run Information is automatically inserted

- Open Trigger tab and check boxes

Run # 131869

Metadata: Global? true Can edit? true

General Information Triggers

Group: BeamCommissioning10

Events: 9529098

Rate, Hz: 1684.55698924731182795698

Local Rate, Hz:

Started: 2010-03-23 07:42 PM

Stopped: 2010-03-23 09:18 PM

B field, T: 3.8009812

B field Comment:

L1 key: TSC\_20100318\_002099\_circulating\_ML\_beam1-manual

HLT key: Acdag/physics/firstCollisions10/circulatingBeam/HLT.V1

Stop reason:

/Global/Online/

General Information Component Status and Comments

Dataset name: /Global/Online/ALL

State: OPEN Modified:

Online?: true

Comment

CMS DQM Run Registry (CSC)

Edit Run Save Apply Reset Close

Run # 131869

Metadata: Global? true Can edit? true

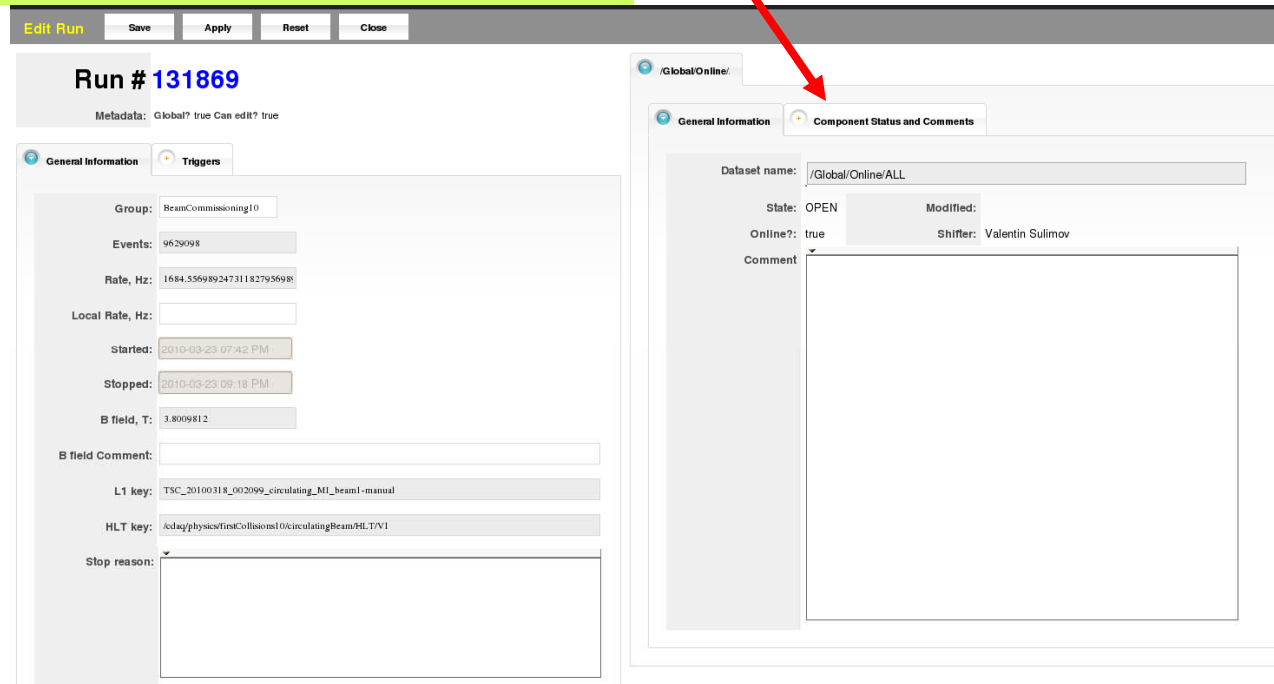
General Information Triggers

Trg.CSC

Trg.Other

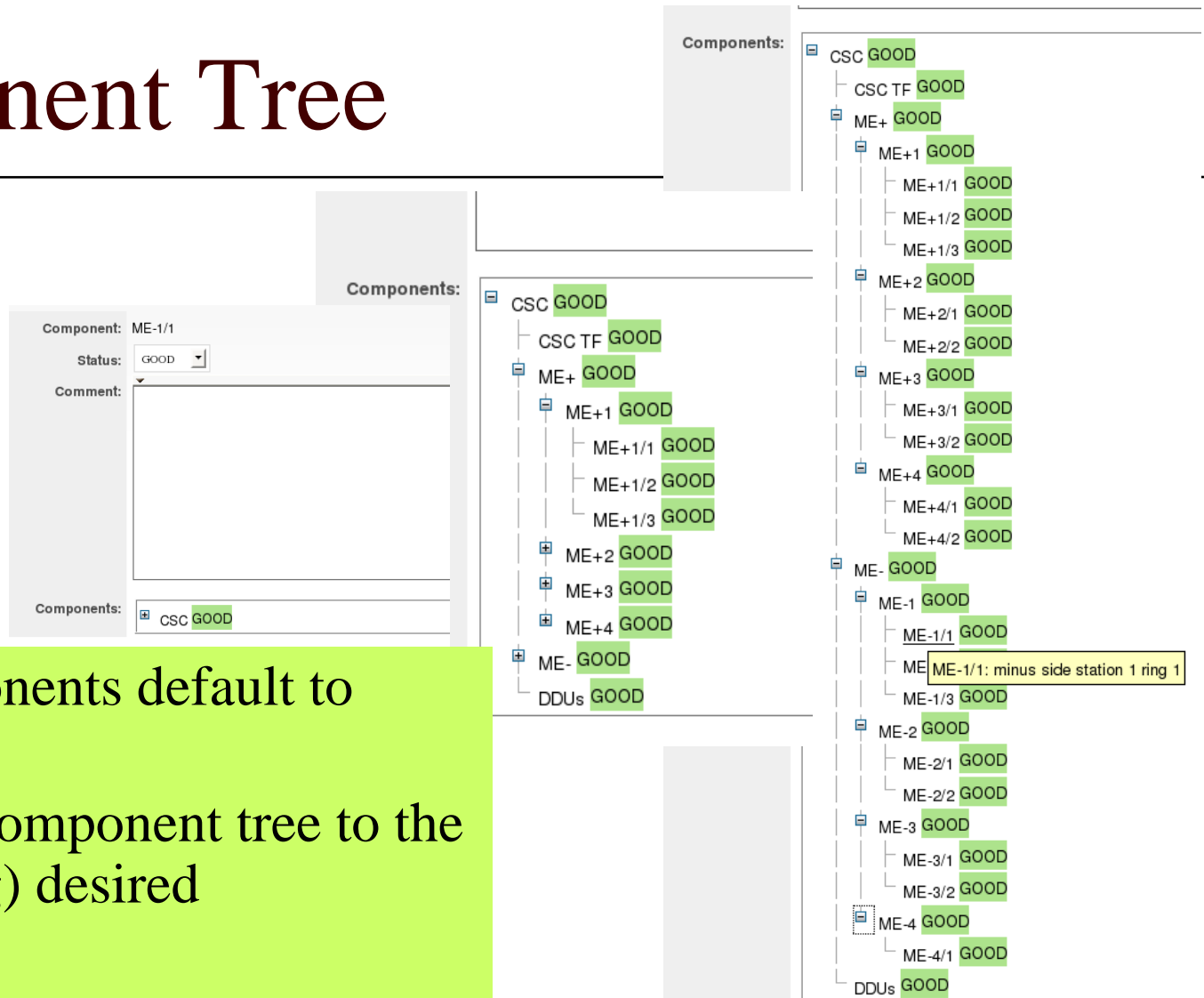
# Edit Run 2

- Go to the right hand side
- Click on the Component Tab



The screenshot displays the 'Edit Run' interface for Run # 131869. The interface is divided into two main panels. The left panel, titled 'General Information', contains various fields for run parameters: Group (BeamCommissioning10), Events (9529098), Rate (1684.55698924731182795698), Local Rate, Started (2010-03-23 07:42 PM), Stopped (2010-03-23 09:18 PM), B field (3.8009812), B field Comment, L1 key (TSC\_20100318\_002099\_circulating\_ML\_beam1-manual), HLT key (Acdaq/physicsfirstCollision10/circulatingBeam/HLT.V1), and Stop reason. The right panel, titled 'Component Status and Comments', shows the 'Component Status and Comments' tab selected. It displays the Dataset name (/Global/Online/ALL), State (OPEN), Online? (true), Modified, and Shifter (Valentin Sulimov). A red arrow points to the 'Component Status and Comments' tab.

# Component Tree



- All Components default to GOOD
- Open the component tree to the level (Ring) desired
- Edit

# Top Page for Edit of a CSC Run

**Run # 130048**  
Metadata: Global? true Created: 2010-03-05 11:15:59.0 Modified: 2010-03-05 11:15:59.0 Can edit? true

**General Information** | **Triggers**

Group: Okta1  
Events: 27686701  
Rate, Hz: 879.63439680392156862745068039  
Local Rate, Hz: 0  
Started: 2010-03-04 10:40 PM  
Stopped: 2010-03-05 07:27 AM  
B field, T: 0.01882  
B field Comment:  
L1 key: TSC\_002065\_00304\_Other\_Cfg20103\_GMTsynch06\_RCT\_DTFC\_SCTF\_BCAL\_BCAL\_DT\_RPC\_GCT\_MI  
HLT key: xduycoomic.com.misking2010/SingleBeam/HLT\_V3  
Stop reason:

**Component Status and Comments**

Component:   
Status: GOOD  
Comment:

Components:

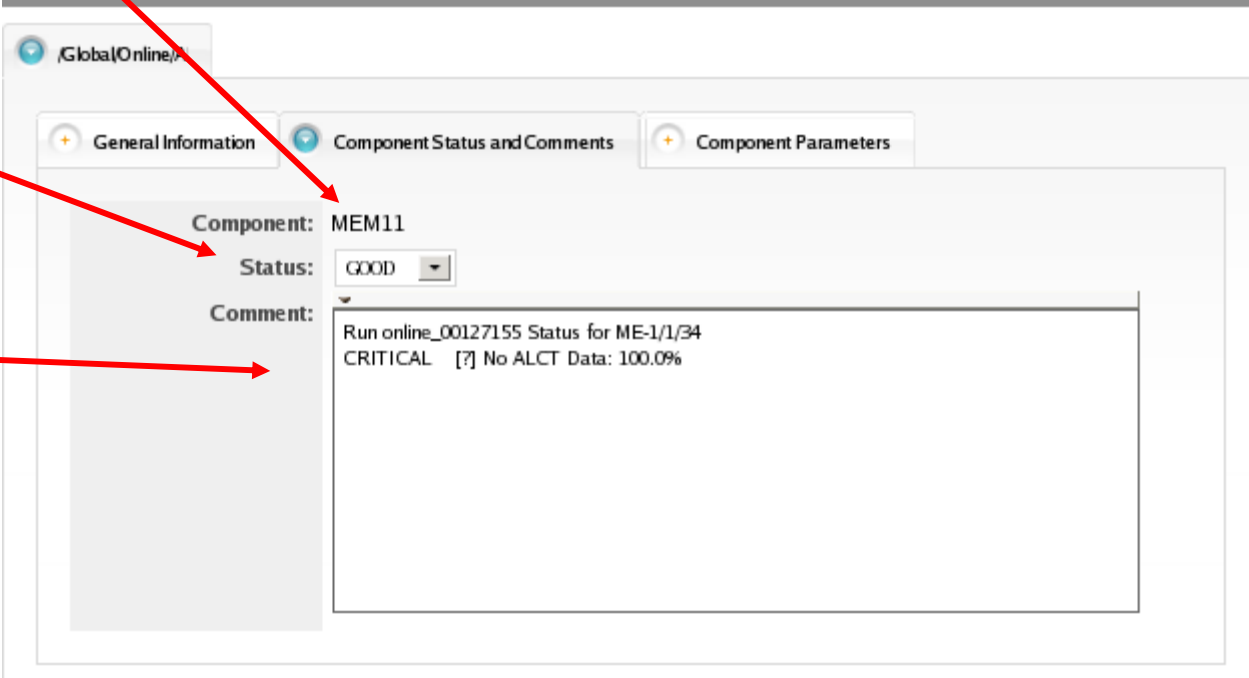
- CSC GOOD
  - CSC TF GOOD
  - DDUs GOOD
  - ME GOOD
    - ME-1 BAD
      - ME-1/1 GOOD
      - ME-1/2 GOOD
      - ME-1/3 GOOD
    - ME-2 GOOD
    - ME-3 GOOD
    - ME-4 GOOD
    - ME+ GOOD
      - ME+1 BAD
        - ME+1/1 GOOD
        - ME+1/2 GOOD
        - ME+1/3 GOOD
      - ME+2 GOOD
        - ME+2/1 GOOD
        - ME+2/2 GOOD
      - ME+3 GOOD
      - ME+4 GOOD

- 'Save to save changes and exit
- 'Apply' to save and stay in edit

- From this page the RR for this run can be filled out or changed

# Component Status and Comments

- When an item in the tree the item name is shown
- The proper Status must be chosen
  - See definition of ‘Status for a Ring’
- The proper comment must be entered
  - See ‘templates for ring’



The screenshot displays a software interface with three tabs: 'General Information', 'Component Status and Comments', and 'Component Parameters'. The 'Component Status and Comments' tab is active. It shows the following fields:

- Component: MEM11
- Status: GOOD (dropdown menu)
- Comment: Run online\_00127155 Status for ME-1/1/34 CRITICAL [?] No ALCT Data: 100.0%

Red arrows from the text on the left point to these fields: one to the component name, one to the status dropdown, and one to the comment text area.

# Input Status for each Ring

The screenshot shows a web application interface with a breadcrumb path "/Global/Online/". There are three tabs: "General Information", "Component Status and Comments", and "Component Parameters". The "Component Status and Comments" tab is active. It contains a form with the following fields:

- Component:** A text input field.
- Status:** A dropdown menu with options: EXCL, GOOD, BAD, NOTSET, and **NOTSET** (highlighted).
- Comment:** A large text area.

A red arrow points from the "Component" field to the "Status" dropdown. A red dotted circle highlights the "Status" dropdown and its options.

- Choose **GOOD** / **BAD** / ...
  - According to table

# Edit Run 3

- Set DQM to filter on CRITICAL
- Set 'Compare to' run to last run registered
- Log to the elog all CRITICAL errors that are RED
  - Not a REPARING\_PROBLEM
  - Not a KNOWN\_PROBLEM
- Enter this problem into the RR
  - Copy text on CRITICAL errors into RR comment box

ME-3/2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
ME-4/1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
ME-4/2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36

Severity legend: **LOW\_STAT** **MINOR** **TOLERABLE** **SEVERE** **CRITICAL** **REPARING\_PROBLEM** **KNOWN\_PROBLEM** **NO\_DATA** **FILTERED**

<b>Report Status</b>	
Run online_00131869 Status for ME-4/1/15	Known as Compared to Run online_00131826
CRITICAL [?] DMB-Input FIFO Full: 190 events (100.000%)	Not enough events for occupancy checks (253 events, needs > 300)
CRITICAL [?] DMB-Input FIFO Full: ALCT_FIFO_FULL 190 events (0.100%)	
CRITICAL [?] No ALCT Data: 100.0%	
CRITICAL [?] No CLCT Data: 100.0%	

# Edit Run 4

- Enter into RR comment box for this ring all CSC that are
  - CRITICAL ^ REPEATING\_PROBLEM
  - CRITICAL ^ KNOWN PROBLEM
  - NO\_DATA
- Example => ME-1/1/11 REPEATING
  - Or => ME-1/1/15 NO DATA

	ME-1/2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
	ME-1/1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
ME-	ME-1/1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
	ME-1/2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
	ME-1/3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
	ME-2/1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
	ME-2/2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
	ME-3/1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
	ME-3/2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
	ME-4/1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
	ME-4/2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36

EMU System Views

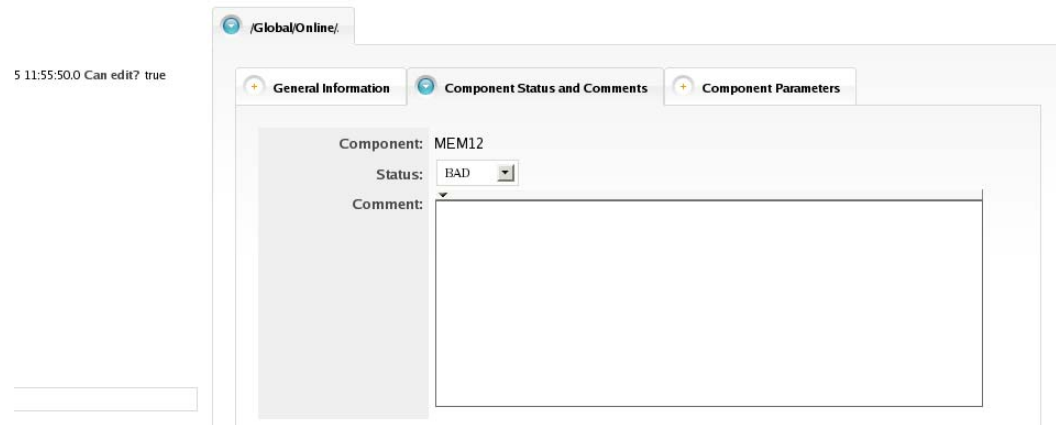
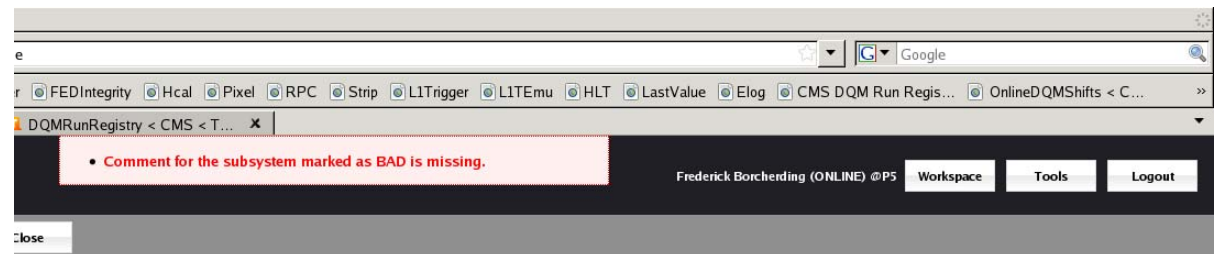
Severity legend: **LOW\_STAT** **MINOR** **TOLERABLE** **SEVERE** **CRITICAL** **REPEATING\_PROBLEM** **KNOWN\_PROBLEM** **NO\_DATA** **FILTERED**

Report Status	
<b>SEVERE</b>	Format Errors: CFEB DAV Error 181 events (27.424%)
<b>SEVERE</b>	CFEB Low SCA Efficiency: CFEB3 Layer1 (2.277% < 20.0% from average)
<b>CRITICAL</b>	CFEB No SCA Data: CFEB3 Layer2
<b>SEVERE</b>	CFEB Low SCA Efficiency: CFEB3 Layer3 (0.841% < 20.0% from average)
<b>SEVERE</b>	CFEB Low SCA Efficiency: CFEB3 Layer4 (0.425% < 20.0% from average)
<b>SEVERE</b>	CFEB Low SCA Efficiency: CFEB3 Layer5 (1.649% < 20.0% from average)
<b>SEVERE</b>	CFEB Low SCA Efficiency: CFEB3 Layer6 (2.316% < 20.0% from average)
<b>SEVERE</b>	Format Errors: CFEB DAV Error 163 events
<b>SEVERE</b>	CFEB Low SCA Efficiency: CFEB3 Layer
<b>CRITICAL</b>	CFEB No SCA Data: CFEB3 Layer2
<b>CRITICAL</b>	CFEB No SCA Data: CFEB3 Layer3
<b>SEVERE</b>	CFEB Low SCA Efficiency: CFEB3 Layer



# II.C Ring info input missed comment

- A comment must be added for each ring graded as BAD



# Viewing Registered Runs

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- The runs are viewed from the top CSC RR page
- The following slides show how to access the information stored in the RR
- Remember that the RR fills a db that can be access at any later time

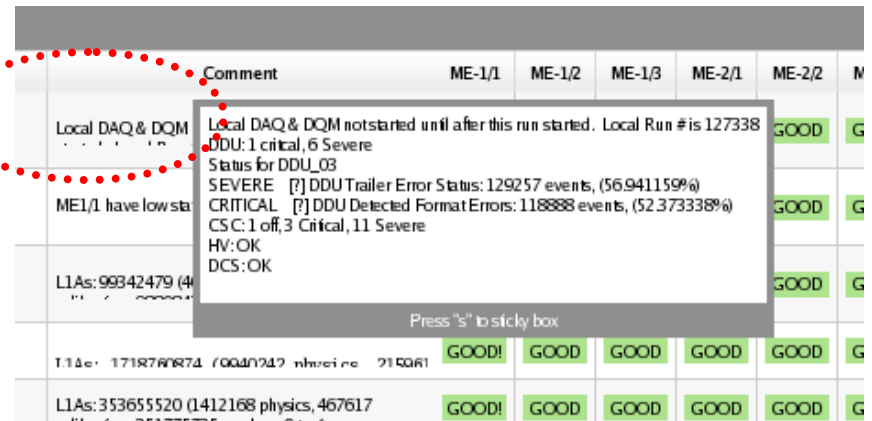
## II.E CSC RR – Listing of Created Runs

- This is the top page for the CSC registered runs
- Moving the cursor over any of the columns on the RHS opens a panel showing the comments

CMS DQM Run Registry (CSC)										Frederick Borcherding (ONLINE) @P5																	
Runs										7 Items. Show 7 from 1 to 7. Page 1 / 1																	
Number	Group	Events	Rate, Hz	Started	Duration	State	Dataset	Shifter	Comment	ME-1/1	ME-1/2	ME-1/3	ME-2/1	ME-2/2	ME-3/1	ME-3/2	ME-4/1	ME+1/1	ME+1/2	ME+1/3	ME+2/1	ME+2/2	ME+3/1	ME+3/2	ME+4/1	ME+4/2	
127168	MWGR	149,099,922	71,302.443	Wed 10-02-10 08:29:00	35.00	OPEN	Global/Online/ALL	Frederick Borcherding	ME1/1 have lowstats	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!
127161	MWGR	97,632,382	73,727.182	Wed 10-02-10 07:31:00	23.00	OPEN	Global/Online/ALL	Frederick Borcherding	L1As: 99342479 (401581 physics, 132466 physics) 99999973 physics Data	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!
127155	MWGR	1,716,128,316	79,232.094	Tue 09-02-10 23:53:00	06:03.00	OPEN	Global/Online/ALL	Frederick Borcherding	L1As: 1718749874 (600000 physics) 210081	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!
127096	MWGR	1,785,430	1,009.983	Tue 09-02-10 13:34:00	35.00	SIGNOFF	Global/Online/ALL	Frederick Borcherding	CR - 70Hz CSC No Problems	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!
126984	MWGR	2,573,050	810.21	Mon 08-02-10 14:33:00	54.00	SIGNOFF	Global/Online/ALL	Frederick Borcherding	First Global run of 2010 CR running	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!
125955	MWGR	2,100,000	1,200	Thu 28-01-10 21:57:00	49.00	SIGNOFF	Global/Online/ALL	Gregory Rakness		GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!	GOOD!
123075	Test	9,664,934	1,743.398	Mon 30-11-09 11:08:00	01:35.00	SIGNOFF	Global/Online/ALL	Valdas	<a href="http://ccmsdqm04.cern.ch/runregistry/">ccmsdqm04.cern.ch/runregistry/</a>	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	NOTSET	

# View RUN Comment Text from RR

- View the run  
‘Comment’ text from  
the top RR page by  
placing the cursor over  
the run comment box
- Compare the comment  
for different runs by  
moving the cursor up  
and down over the  
boxes



The screenshot shows a table with columns for 'Comment', 'ME-1/1', 'ME-1/2', 'ME-1/3', 'ME-2/1', 'ME-2/2', and 'M'. A tooltip is displayed over the 'Comment' column of the first row, showing the following text:

```
Local DAQ & DQM not started until after this run started. Local Run # is 127338
DDU: 1 critical, 6 Severe
Status for DDU_03
SEVERE [?] DDU Trailer Error Status: 129257 events, (56.941159%)
CRITICAL [?] DDU Detected Format Errors: 118888 events, (52.373338%)
CSC: 1 off, 3 Critical, 11 Severe
HV: OK
DCS: OK
```

At the bottom of the tooltip, it says "Press 's' to sticky box". The table rows below the tooltip show various run parameters and status indicators like "GOOD!" and "GOOD".

# View Ring Comment for RR

- View the RING comment box for each ring by placing the cursor over the ring status
- Compare the ring comment for different runs by moving the cursor up and down the column for this ring

12 items. Show 12 from 1 to 12. Page 1

	ME-1/1	ME-1/2	ME-1/3	ME-2/1	ME-2/2	ME-3/1	ME-3/2	ME-4/1	ME+1/1	ME+1/2	ME+1/3
un	GOOD	Status for ME+1/2/06 CRITICAL [?] Hotchamber: 127521 events, 12 times more than average events counter (avg events=10740)	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD!	GOOD
	GOOD	CRITICAL [?] FormatErrors: 118885 events (93.228%)	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD
	GOOD	CRITICAL [?] FormatErrors: ALCT DAV Error 118885 events (93.228%)	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD
	GOOD	CRITICAL [?] DMB-InputTimeout 118885 events (93.228%)	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD
214061	GOOD	CRITICAL [?] DMB-InputTimeout ALCT_START_TIMEOUT 118885 events (93.228%)	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD
	GOOD	CRITICAL [?] No CLCT Data: 98.6%	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD
	GOOD	CRITICAL [?] No CFEB Data: 95.5%	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD
	GOOD	Status for ME+1/2/15 NO DATA	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD

Press 's' to sticky box

# Run Number Options

- Clicking on a run number will open an option box
- ‘View Details’ will open a details page for this run
  - This run can be edited from that page

Runs		Refresh	Filter	Runinfo	Data	
Number	Group	Events	Rate, Hz	Started	Duration	State
127337	MMGR	35,042,953	968.016	Wed 10-02-10 23:15:00	10:04:00	OPEN
			71,302.443	Wed 10-02-10 08:29:00	35:00	SIGNOFF
			73,727.182	Wed 10-02-10 07:31:00	23:00	SIGNOFF
127155	MMGR	1,716,128,316	79,232.094	Tue 09-02-10 23:53:00	06:03:00	SIGNOFF
127146	MMGR	350,000,627	75,280.711	Tue 09-02-10 01:10:00	01:10:00	SIGNOFF

# View Details

- Top half of ‘View Details’ view
- This shows what was on the LHS of the Edit Page
- Click on ‘Edit’ button at top to edit contents

CMS **CMS DQM Run Registry (CSC)**

View Run Edit Print Reset Close

Direct Link: <http://pccmsdqm04.cern.ch/runregistry/view.iframe?run=9023>

Workspace: CSC

## Run # 127155

Events: 1716128316

Rate, Hz: 79232.0937677053824362606232294617563739

Started: 2010-02-09 23:53:00.0

Stopped: 2010-02-10 05:56:00.0

B field, T: 0.01882

Group: MWGR

Global? true

Created: 2010-02-10 12:15:52.0

Modified: 2010-02-10 12:30:02.0

B field Comment:

L1 key: TSC\_001892\_100209\_TEST\_GTgt20103\_GMTsynctf06\_RCT\_DTTF\_CSCTF\_ECAL\_HCAL\_DT\_RPC\_GCT\_MI

HLT key: /cdaq/cosmic/commissioning2010/GR/HLTTriggerType/V3

Stop reason:

Trigger	Status	Comment
CSC	true	
Other	true	

Beam Status

From#	To#	Status

Time	E, GeV	Fill	Ix10 <sup>8</sup> (B1)	Ix10 <sup>8</sup> (B2)	Comment
2010-02-10 03:45:03.0	4500	924	0.0	0.0	Comments 09-02-2010 15:40:03 : Expts: Switch to internal dock, as we stop the RF dock until further notice LHC ACCESS: An ADI+I is obligatory
2010-02-10 03:44:03.0	4490	924	0.0	0.0	Comments 09-02-2010 15:40:03 : Expts: Switch to internal dock, as we stop the RF dock until further notice LHC ACCESS: An ADI+I is obligatory
2010-02-10 03:30:04.0	4500	924	0.0	0.0	Comments 09-02-2010 15:40:03 : Expts: Switch to internal dock, as we stop the RF dock until further notice LHC ACCESS: An ADI+I is obligatory
2010-02-10 03:29:04.0	4490	924	0.0	0.0	Comments 09-02-2010 15:40:03 : Expts: Switch to internal dock, as we stop the RF dock until further notice LHC ACCESS: An ADI+I is obligatory
2010-02-10 03:06:04.0	4500	924	0.0	0.0	Comments 09-02-2010 15:40:03 : Expts: Switch to internal dock, as we stop the RF dock until further notice LHC ACCESS: An ADI+I is obligatory
2010-02-10 03:05:03.0	4490	924	0.0	0.0	Comments 09-02-2010 15:40:03 : Expts: Switch to internal dock, as we stop the RF dock until further notice LHC ACCESS: An ADI+I is obligatory
2010-02-10 03:02:03.0	4500	924	0.0	0.0	Comments 09-02-2010 15:40:03 : Expts: Switch to internal dock, as we

# View Details

- Bottom half of 'View Details' view
- This shows what was entered on the RHS of the Edit Page

State: OPEN  
 Shifter: Frederick Borcherding  
 Online?: true  
 Submitted to DBS: false  
 Modified: 2010-02-10 12:30:02.0  
 LIAs: 1718760874 (9940242 physics, 2159618 calibration, 1706661014 random, 0 test)  
 Average LIA rate: ~79.1 kHz (~457.2 Hz physics, ~99.3 Hz calibration, ~78.5 kHz r  
 Read-out components: CSC DAQ DCS DQM DT ECAL HCAL PIXEL RPC SCAL TRACKER TRG  
 Global trigger components: TEST RCT DTTF CSCTF ECAL HCAL DT RPC GCT MI  
 CSC TF trigger key: 310110  
 B-field: 0  
 Comment: CSC HV Configuration:ON  
 Beam Status (1, 2, Both, Collisions):CR  
 DDU - o Critical, 5,12,14,20,32 Severe  
 CSC- 3 Critical, 13 Severe, none are low statistics  
 PGL - OK  
 DCS - OK

Components:

Subsystem	Status	Comment
ME-1/1	GOOD	Run online_00127155 Status for ME-1/1/34 CRITICAL [?] No ALCT Data: 100.0%
ME-1/2	GOOD	
ME-1/3	GOOD	
ME-2/1	GOOD	
ME-2/2	GOOD	
ME-3/1	GOOD	
ME-3/2	GOOD	
ME-4/1	GOOD	
ME+1/1	GOOD	Run online_00127155 Status for ME+1/1/20 CRITICAL [?] No ALCT Data: 100.0%
ME+1/2	GOOD	
ME+1/3	GOOD	
ME+2/1	GOOD	Run online_00127155 Status for ME+2/1/14 CRITICAL [?] DMB-Input FIFO Full: 9603 events (100.000%) CRITICAL [?] DMB-Input FIFO Full: ALCT_FIFO_FULL 9603 events (0.100%) CRITICAL [?] No ALCT Data: 100.0% CRITICAL [?] No CLCT Data: 100.0%
ME+2/2	GOOD	
ME+3/1	GOOD	
ME+3/2	GOOD	
ME+4/1	GOOD	
ME+4/2	GOOD	

Summary Values:



# Run Sign Off

- Clicking on a dataset number will open an option box
- A run can be edited by choosing the 'edit' option

- A run is moved to SIGNOFF from here
- When you have filled in the RR for this run >> click 'Move to SIGNOFF'



The screenshot shows a table with columns: Dataset, Shifter, Comment, and a status column. A context menu is open over the first row, showing options: View Details, Edit, Move to OPEN, Move to SIGNOFF, Move to COMPLETED, and Remove. The status column contains 'GOOD!' for all visible rows.

Dataset	Shifter	Comment	ME-1/1
Global Onli	Frederick	Local DAQ & DQM not started until after this run	GOOD!
Global Onli		I have low stats	GOOD!
Global Onli		: 99342479 (401581 physics, 132466	GOOD!
Global	Frederick		GOOD!

- After a run has been signed off by the shifter it can no longer be edited
- Later an expert will review this run and can add information or override the shifter but cannot change or delete what the shifter inserted

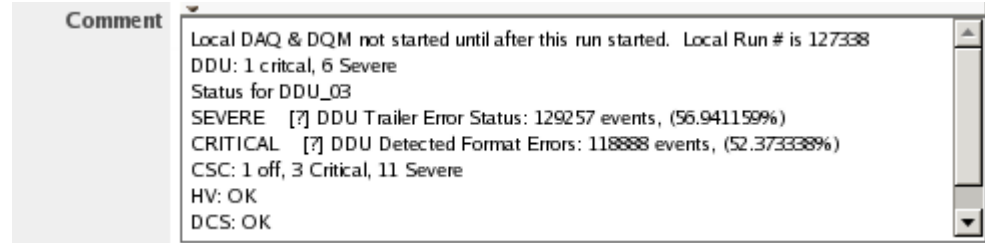
# Categories

- CSC >> Overall grade for this run
  - BAD >
- CSC TF >> Grade and details for TF
  - tbd
- DDU's >> Grade and details for DDU
  - BAD > 2 or more CRITICAL (including known)
- Rings >>
  - BAD > 2 or more CRITICAL (including known)
  - Insert details for each CRITICAL but not known

CSC	CSC TF	DDU's	ME-1/1	ME-1/2	ME-1/3	ME-2/1	ME-2/2	ME-3/1	ME-3/2	ME-4/1	ME+1/1	ME+1/2	ME+1/3	ME+2/1	ME+2/2	ME+3/1	ME+3/2	ME+4/1	ME+4/2
GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD!	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD

# Template for Run Comment Box

- Free format text comment
  - A short one line comment that sums up the run status
- DDU
  - Enter in how many were critical (RED) and how many were Severe (orange)
  - Cut/paste the details from DQM on the critical DDU(s)
- CSC
  - Enter the total numbers here,
  - The details are in the Ring comments
- HV
  - ALL ON/ OUTER ON
  - Any unusual trips
- DCS
  - Any unusual trips before or during run
- Additional comments
  - What you feel future users of the data from this run should know



Comment

```
Local DAQ & DQM not started until after this run started. Local Run # is 127338
DDU: 1 critical, 6 Severe
Status for DDU_03
SEVERE   [?] DDU Trailer Error Status: 129257 events, (56.941159%)
CRITICAL [?] DDU Detected Format Errors: 118888 events, (52.373388%)
CSC: 1 off, 3 Critical, 11 Severe
HV: OK
DCS: OK
```

*free format text comment – 1 line*  
DDU: *x* critical, *y* Severe  
*cut & paste detail for critical DDU(s)*  
CSC: *x* critical, *y* Severe  
HV: (*ON/OUTER-ON/STANDBY*); (*OK/List Problem*)  
DCS: (*OK/List Problem*)  
*Additional Comments (optional)*

# Template for RING Comment Box

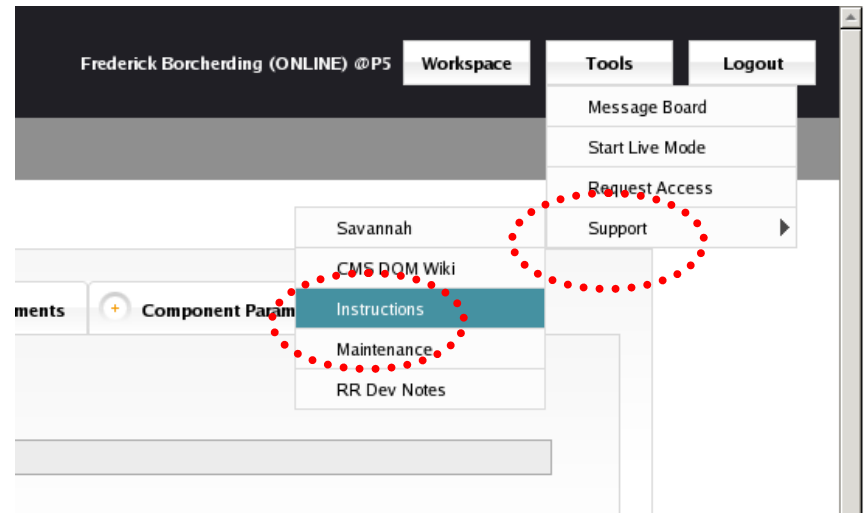
		CRITICAL [?] NO ALCT Data: 100.0%
		Status for ME+1/2/06
		CRITICAL [?] Hot chamber: 127521 events, 12 times more than average events counter (avg events=10740)
		CRITICAL [?] Format Errors: 118885 events (93.228%)
		CRITICAL [?] Format Errors: ALCT DAV Error 118885 events (93.228%)
ME+1/2	GOOD	CRITICAL [?] DMB-Input Timeout: 118885 events (93.228%)
		CRITICAL [?] DMB-Input Timeout: ALCT_START_TIMEOUT 118885 events (93.228%)
		CRITICAL [?] No CLCT Data: 98.6%
		CRITICAL [?] No CFEB Data: 95.5%
		Status for ME+1/2/15 NO DATA
ME+1/2	GOOD	

- Cut/paste the text from the DQM Display as shown in the slides for each CRITICAL (RED) CSC

- Put in all critical chambers in this ring
- Insert only critical items

# Links

- The support Twiki pages can be reached via this route
- You should use this help feature for operational questions



Global RR -> <https://twiki.cern.ch/twiki/bin/view/CMS/DQMRunRegistry#Instructions>

Global DQM -> <https://twiki.cern.ch/twiki/bin/view/CMS/DQM>



# Backup Slides

---

# Needed

- Need operator manual for DQM display
- Need changes to TOP CSC Page
  - Overall run grade column
  - DDU column
  - TF column
- Regardless of who or where the CSC validation is conducted
  - Need to test and evaluate the existing tools
  - Need to begin establishing procedures

# Possible data flow and evaluation scheme

---

- Data at online DQM
  - CSC shifter evaluate run using online DQM in real-time
  - Begin when reasonable statistics for the run have been reached
  - Register when run ends
  - Criteria based on ‘CSC Table’ ‘EMU Summary’ only
- data at offline DQM
  - Re-evaluate run using as above?
  - Expert or shifter?
  - Then expert?
- Data at global DQM
  - Global DQM shifter evaluates CSC as part of global evaluation
- Data at offline
  - Which streams?
    - Express
    - Prompt
    - Online
  - Tracks and physics quantities included? Only DQM like?
  - CSC shifter evaluate?
    - Different shifter / place
    - Expert
- One CSC expert reviews all evaluations?



Component: ME-4/1

Status: GOOD

Comment:

Status for ME-4/1/15

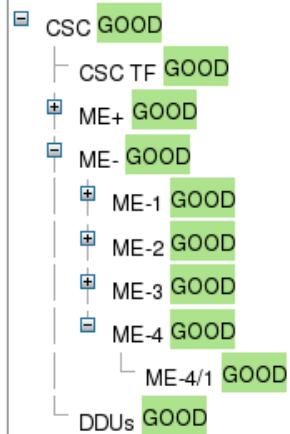
CRITICAL [?] DMB-Input FIFO Full: 190 events (100.000%)

CRITICAL [?] DMB-Input FIFO Full: ALCT\_FIFO\_FULL 190 events (0.100%)

CRITICAL [?] No ALCT Data: 100.0%

CRITICAL [?] No CLCT Data: 100.0%

Components:



General Information **Component Status and Comments**

Component: ME-1/1

Status:


Comment:








Status for ME-1/1/1  
CRITICAL [?] CFEB No SCA Data: CFEB3 Layer2  
  
Compared to Run online\_00131826  
CRITICAL CFEB No SCA Data: CFEB3 Layer2  
CRITICAL CFEB No SCA Data: CFEB3 Layer3

Components:

- [-] CSC GOOD
  - [-] CSC TF GOOD
  - [-] ME+ GOOD
  - [-] ME- GOOD
    - [-] ME-1 GOOD
      - [-] ME-1/1 GOOD
      - [-] ME-1/2 GOOD
      - [-] ME-1/3 GOOD
    - [-] ME-2 GOOD
    - [-] ME-3 GOOD
    - [-] ME-4 GOOD
      - [-] ME-4/1 GOOD



 **CMS DQM Run Registry (CSC)**

Runs  RunInfo  Refresh  Table  LumiSec   

Run Number	Group	Events	Rate, Hz	Run Started	Run Duration	LS	State	Dataset	Shifter	Comment	ME-	ME-1	ME-2	ME-3	ME-4	ME-11	ME-12	ME	
13189	BeamCommissioning10	962008	1884.587	Tue 23-03-10 19:42:00	00:01:36:00	0	OPEN	Global Online/ALL	Valentin Gulmoy		GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	BAD!	GOOD	GO
131711	BeamCommissioning10	1893745	742.029	Mon 22-03-10 22:08:00	00:00:44:00	0	SIGNOFF	Global Online/ALL	Borisy Vasilyev		GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GO

# Detail View

Direct Link: <http://pccmsdqm04.cern.ch/runregistry/view iface?run=724084>

Workspace: CSC

## Run # 131869

Events: 9629098

Rate, Hz: 1684.556989247311827956989247311827956989

Started: 2010-03-23 19:42:00.0

Stopped: 2010-03-23 21:18:00.0

B field, T: 3.8009812

L1 key: TSC\_20100318\_002099\_circulating\_MI\_beam1-manual

HLT key: /cdaq/physics/firstCollisions10/circulatingBeam/HLT/V1

Triggers	Trigger	Status	Comment
	Trg.CSC	true	
	Trg.Other	true	

Beam Status	Time	E_GeV	Fill	$I \times 10^9$ (B1)	$I \times 10^9$ (B2)	Comment
	2010-03-23 21:11:04.0	450.0	979	0.0	0.0	Comments 23-03-2010 21: Injecting in wrong bucket RF experts are investigatin
	2010-03-23 21:07:04.0	450.0	979	0.0	0.0	Comments 23-03-2010 21: Problems with timing Not possible to inject for the
	2010-03-23 20:04:04.0	450.0	979	0.0	0.0	Comments 23-03-2010 20: Both beams back at 450 Ge Preparing injection & dump
	2010-03-23 19:53:04.0	450.0	979	0.0	0.0	Comments 23-03-2010 19: Pre-cycle completed, prep for injections.
	2010-03-23 19:48:03.0	450.0	979	0.0	0.0	Comments 23-03-2010 19: Pre-cycle almost complete for injections.
	2010-03-23 19:47:04.0	450.0	978	0.0	0.0	Comments 23-03-2010 19: Pre-cycle almost complete for injections.
	2010-03-23 19:46:05.0	409.0	978	0.0	0.0	Comments 23-03-2010 19: Pre-cycle almost complete

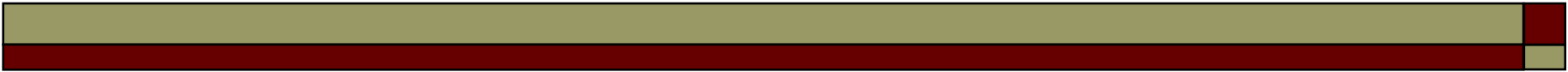
enu: supervisor: Application x Run Control and Monitoring Sy... x CMS DQM Run Registry x

Modified: 2010-03-24 09:55:58.0

Comment

Components:

Subsystem	Status	Comment
ME-1/1	<b>BAD</b>	Status for ME-1/1/11 CRITICAL [?] CFEB No SCA Data: CFEB3 Layer2 Compared to Run online_00131026 CRITICAL CFEB No SCA Data: CFEB3 Layer2 CRITICAL CFEB No SCA Data: CFEB3 Layer3
ME-1/2	GOOD	
ME-1/3	GOOD	
ME-2/1	GOOD	
ME-2/2	GOOD	
ME-3/1	GOOD	
ME-3/2	GOOD	
ME-4/1	GOOD	Status for ME-4/1/15 CRITICAL [?] DMB-Input FIFO Full: 190 events (100.000%) CRITICAL [?] DMB-Input FIFO Full: ALCT_FIFO_FULL 190 events (0.100%) CRITICAL [?] No ALCT Data: 100.0% CRITICAL [?] No CLCT Data: 100.0%
ME+1/1	GOOD	
ME+1/2	GOOD	
ME+1/3	GOOD	
ME+2/1	GOOD	
ME+2/2	GOOD	
ME+3/1	GOOD	
ME+3/2	GOOD	
ME+4/1	GOOD	
ME+4/2	GOOD	
ME+1	GOOD	
ME+2	GOOD	
ME+3	GOOD	
ME+4	GOOD	



## Run # 130424

Metadata: Global? true Created: 2010-03-09 16:50:09 Modified: 2010-03-09 17:03:13 Can edit? true

General Information
  Triggers

Group:

Events:

Rate, Hz:

Local Rate, Hz:

Started:

Stopped:

B field, T:

B field Comment:

L1 key:

HLT key:

Stop reason:

GlobalOnlineA

General Information
  Component Status and Comments

Component: ME-1/1

Status:

Comment:

Components:

- CSC GOOD
- CSC TF GOOD
- DDUs GOOD
- ME- GOOD
- ME-1 GOOD
- ME-1/1 GOOD
- ME-1/2 GOOD
- ME-1/3 GOOD
- ME-2 GOOD
- ME-3 GOOD
- ME-4 GOOD
- ME+ GOOD
- ME+1 GOOD
- ME+1/1 GOOD
- ME+1/2 GOOD
- ME+1/3 GOOD
- ME+2 GOOD
- ME+2/1 GOOD
- ME+2/2 GOOD
- ME+3 GOOD
- ME+4 GOOD

Information **Component Status and Comments**

Component: ME-1/1

Status:

Comment: Chamber 15 is dead.

Components:

- CSC GOOD
  - CSC TF GOOD
  - DDUs GOOD
- ME- GOOD
  - ME-1 GOOD
    - ME-1/1 GOOD
    - ME-1/2 GOOD
    - ME-1/3 GOOD
  - ME-2 GOOD
  - ME-3 GOOD
  - ME-4 GOOD
- ME+ GOOD
  - ME+1 GOOD
    - ME+1/1 GOOD
    - ME+1/2 GOOD
    - ME+1/3 GOOD
  - ME+2 GOOD
    - ME+2/1 GOOD
    - ME+2/2 GOOD
  - ME+3 GOOD
  - ME+4 GOOD



Component: ME-1/1

Status:

Comment:

Chamber 15 is dead.

Components:

