

*Speaker's Bureau and  
Luminosity Databases:  
Status and Issues*

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MSU

Taking Stock Meeting

June 30, 2008

# *Speaker's Bureau DB*

Maintenance now taken over by CD

Official Release from CVS

Moved web server to standard port

remote read access by D0 collaborators

**without certificates**

**but behind D0 Web Login**

D0 is addressing updates to authors' list

Jonckheere plans to adapt Gallas' script  
make it part of masthead/author updates

# *Luminosity DB: Content*

Recalibration completed

no new calibration planned for now...

Prevented double insertion of ProdChecks

Understood structure of status messages

J. Linnemann, with sql help from S. White

**Deleted ~ 1B trigger level status msgs** S. White

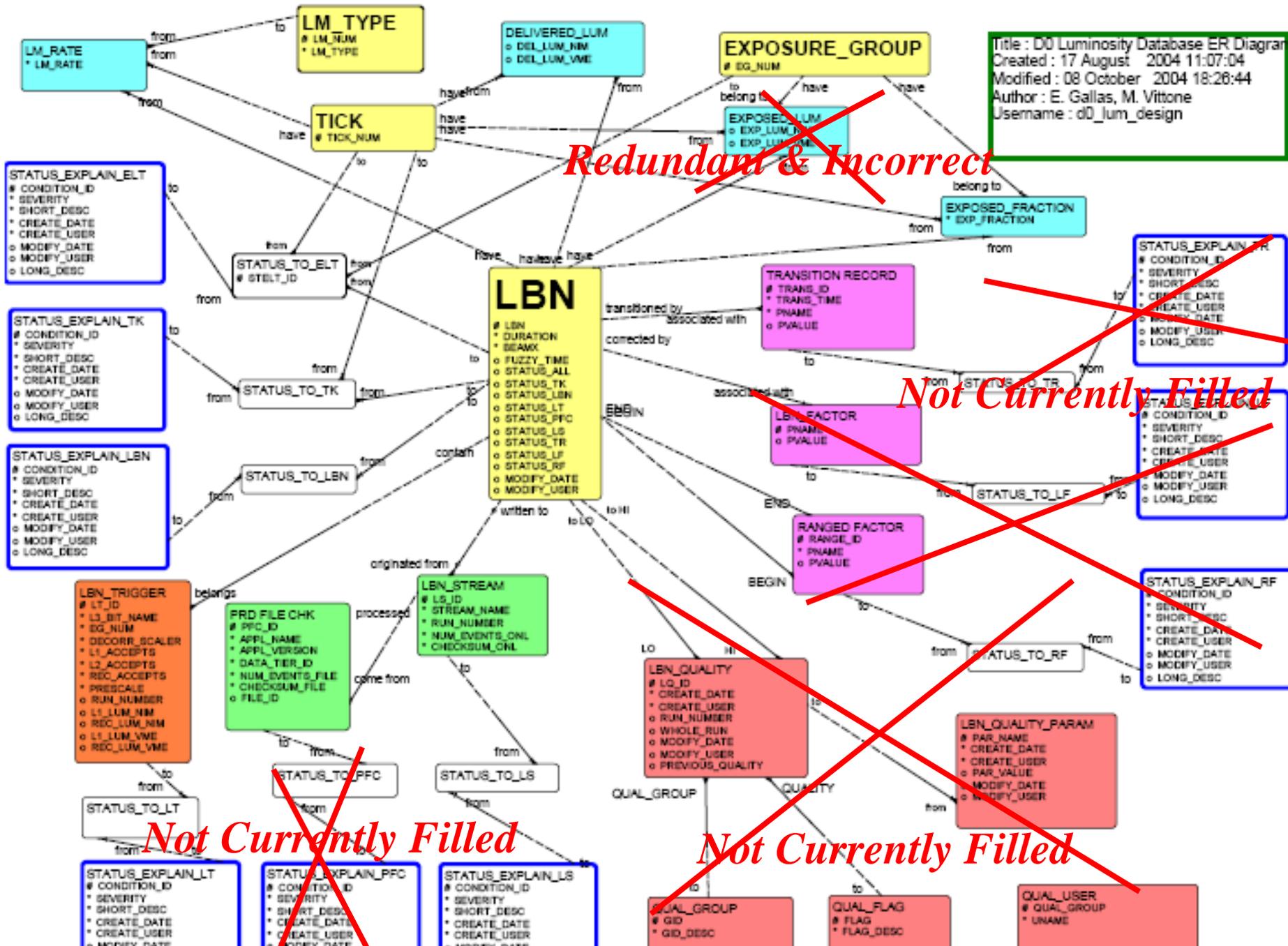
required temporary tables, plus moving index to sep disk

performance got worse and worse as deletion proceeded

Temporary tables from these two operations removed

**Deleted ExposedLum table** S. White

Title : D0 Luminosity Database ER Diagram  
Created : 17 August 2004 11:07:04  
Modified : 08 October 2004 18:26:44  
Author : E. Gallas, M. Vittone  
Username : d0\_lum\_design



~~Redundant & Incorrect~~

~~Not Currently Filled~~

~~Not Currently Filled~~

~~Not Currently Filled~~

# Pending DB Modifications

**Delete \_Old columns**    **modify all DeLum and LBNTrigger rows**

wait for resolution of “redo” logic causing double correction (Marco)

**Version Stamp**                    **modify ALL LBN rows**

Re-purpose 2 columns in lbn record

VME or NIM                            which is official?

A 5/7/07 D0note 5139            calibration version

Fill LBN.FuzzyTime                    only new LBNS

**More Scripts** to write and run

**modifications to a few hundred lbns**

**but have to read many rows/tables to find them**

new lbn status codes

for any **tk and elt status**, or < **37 ticks delivered**            red

.01E30 **DeLum** tick 0 vs. sum of ticks                            red

ImDAQ **transition record**    red

> 400s **LBN.duration**    orange

lbns on bad lbn **list**    red

trigger\_status 44 to **list** of lbns    from bad trigger/lbn list

and set LT.RecordedLum to {- default} for affected triggers

Verifying content: Im\_access and python/sql job

# *Lum DB Web Interface*

## Improved Web Interface: Margherita Wiersma

many small improvements in request page—thanks!  
several reports faster; quick links to lower level reports  
summary of status messages cross-linked  
more useful ordering of columns; etc etc

**Production release of new code: now default**

## Pending issues with the reports

appearance of plots differs from old online reports: M.W.  
content of some tables differs too: M.W. + D0 investigating

**short of D0 experts:**

which are right: online, or new DB reports?

long term: graphics library change? CD's choice

# Direct links to Status Records

<a href="#">LBN:6149760</a> 1 found	<a href="#">TR:6149760</a> 0 found	<a href="#">DL:6149760</a> 37 found	<a href="#">EF:6149760</a> 111 found	<a href="#">LT:6149760</a> 611 found <a href="#">ST LT:6149760</a>	<a href="#">LR:6149760</a> 151 found	<a href="#">LS:6149760</a> 4 found	<a href="#">PFC:6149760</a> 0 found	<a href="#">EL:6149760</a> 0 found
<a href="#">LBN:6149761</a> 1 found	<a href="#">TR:6149761</a> 0 found	<a href="#">DL:6149761</a> 37 found	<a href="#">EF:6149761</a> 111 found	<a href="#">LT:6149761</a> 611 found <a href="#">ST LT:6149761</a>	<a href="#">LR:6149761</a> 151 found	<a href="#">LS:6149761</a> 4 found	<a href="#">PFC:6149761</a> 0 found	<a href="#">EL:6149761</a> 0 found
<a href="#">LBN:6149762</a> 1 found	<a href="#">TR:6149762</a> 7 found	<a href="#">DL:6149762</a> 37 found	<a href="#">EF:6149762</a> 105 found	<a href="#">LT:6149762</a> 611 found <a href="#">ST LT:6149762</a>	<a href="#">LR:6149762</a> 151 found	<a href="#">LS:6149762</a> 4 found	<a href="#">PFC:6149762</a> 0 found	<a href="#">EL:6149762</a> 0 found
<a href="#">LBN:6149763</a> 1 found <a href="#">ST LBN:6149763</a>	<a href="#">TR:6149763</a> 1 found	<a href="#">DL:6149763</a> 37 found	<a href="#">EF:6149763</a> 76 found	<a href="#">LT:6149763</a> 611 found <a href="#">ST LT:6149763</a>	<a href="#">LR:6149763</a> 151 found	<a href="#">LS:6149763</a> 0 found	<a href="#">PFC:6149763</a> 0 found	<a href="#">EL:6149763</a> 0 found
<a href="#">LBN:6149764</a> 1 found <a href="#">ST LBN:6149764</a>	<a href="#">TR:6149764</a> 0 found	<a href="#">DL:6149764</a> 37 found	<a href="#">EF:6149764</a> 76 found	<a href="#">LT:6149764</a> 611 found <a href="#">ST LT:6149764</a>	<a href="#">LR:6149764</a> 151 found	<a href="#">LS:6149764</a> 0 found	<a href="#">PFC:6149764</a> 0 found	<a href="#">EL:6149764</a> 0 found
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<a href="#">LBN:6149767</a> 1 found <a href="#">ST LBN:6149767</a>	<a href="#">TR:6149767</a> 1 found	<a href="#">DL:6149767</a> 37 found	<a href="#">EF:6149767</a> 76 found	<a href="#">LT:6149767</a> 611 found <a href="#">ST LT:6149767</a>	<a href="#">LR:6149767</a> 151 found	<a href="#">LS:6149767</a> 0 found	<a href="#">PFC:6149767</a> 0 found	<a href="#">EL:6149767</a> 0 found

# Convenient Summaries

STATUS\_TO\_LBNS for LBN= 6080930

Use Transition Records for this LBN

## LBN Info

Duration = 15.362 Delivered Lum(VME) = 160.501 Est LiveFrac = 71.010% Max RecLum(VME) = 113.972 Sum RecAcc = 4273

Status Codes:

LBN : 1 -- 2(1)

## Status Codes

Trigger: 407 -- 12(136) 38(135) 33(136)

ID	Severity	ShortDesc	lbn	Duration	FuzzyDateTime	ReasonEnded	DateTime	LongDesc	CreatedDate
2	yellow	Reduced Precision	6080930	15.362484		SCLimit	11-may-0823:21:21		17-DEC-04

# Lm Access

Bad ticks code in place

ignore dup streams code also (but confusing to users)  
made lum profile across ticks not default (for speed)

Multiple user, multiple trigger requests:

stopped development: felt not very useful

Look at status at lbn\_triggers level? NO

deal with by red lbn status, or - RecLum for trigger

Pending:

make fast lmAccess default

restrict access to stage3

then stop making new stage3 files

then delete them

both waiting on “redo” (Marco)

# General Issues

S. White updated DBservers

dcoracle → cxoracle

Need again for python versions etc?

Please avoid certificates:

they irritate users (even experts)

Web servers:

standard ports for remote users (firewalls)

**Backups:** should revive discussion

shapshots may be more useful than backups

recovery from user error, not hardware failure

time scale more than a few days!

**Aging hardware** replacement?

crashing has stopped...back to sleep?

Online db backups? (Bill Lee comments needed)

	A	B	C	D	E	F	G	H	I	J	K
1	DB Sizes Dated Jan 11, 2008										
2											
3	<b>D0 Offline Production</b>					<b>D0 Online Production</b>					
4	Application/owner	MB	upd freq	contact person		Application/owner	MB	upd freq	contact person		
5	AC_SURVEY	0.3	static?	advisory council?							
6	ALS_OWNER	0.2		what is this???							
7	<b>CAL_CALIBRATION</b>	<b>28,910</b>	daily	Patrice Lebrun		<b>CAL_CALIB</b>	<b>17,022</b>	daily	Patrice Lebrun		
8	CASSETTE_PRD	2,118	static/Temp s	Volker Buescher		<b>CAL_CALIB_0</b>	<b>3,856</b>	static?	Probably a backup of cal_calib		
9	<b>CFT_CALIB</b>	<b>5,297</b>	weekly or les	Dmitri Smirnov		<b>CFT_CALIB</b>	<b>13,043</b>	weekly or les	Dmitri Smirnov		
10						EHIST	32,424		Sirotenko	EPICS slow arch	
11						FANXL	7	what is this?			
12	CPS_CALIB	398	weekly	Patrice Lebrun		FPD_ONL	5	static		FPD pot moving	
13	FPS_CALIB	659	weekly	Patrice Lebrun		HDB	399		Sirotenko	Epics DB	
14	<b>MUON_MSC_CALIB</b>	<b>15</b>	static/"no rea	Linda Stutte		<b>MUON_CMSC_CALIB</b>	<b>9</b>	unused			
15						<b>MUON_FMSC_CALIB</b>	<b>19</b>	unused			
16	<b>MUON_MDT_CALIB</b>	<b>2</b>	static/"no rea	Linda Stutte		<b>MUON_MDT_CALIB</b>	<b>4</b>	unused			
17	<b>MUON_PDT_CALIB</b>	<b>3</b>	~ yearly	Linda Stutte		<b>MUON_PDT_CALIB</b>	<b>10</b>	unused			
18	OFFLINE_CALIBRATION	12	daily	Taka Yasuda							
19	RELREQ_OWNER	10		Alan Jonckheere							
20	<b>RUNS</b>	<b>4,187</b>	daily	Sirotenko		<b>RUNS</b>	<b>4,372</b>	daily	Sirotenko		
21	SAMPRD	205,429	daily			RUN_CONF	98	obsolete			
22	SAM_MONITOR_OWNER	13,939									
23	<b>SMT_CALIB</b>	<b>4,778</b>	~monthly?mc	Sungwoo Youn		<b>SMT_CALIB</b>	<b>12,269</b>	~mo/as need	Sungwoo Youn		
24	SPEAKERDB	1	day-wk	Mike Strauss		<b>SMT_CALIBRATION</b>	218		?		
25	STREAMING	0.3				STT_PARAM	1				
26	TRIGGER_OWNER	63	day-wk	Rick Jesik							
27											
28	Luminosity	556,555	daily	Sirotenko/Linnemann							
29											
30											
31	Total	822,377				Total	83,757				
32											
33	<b>BOLD = both online &amp; offline</b>										
34		>1GB									

# *Backup*

# *Dbserver reorganization?*

## *See Marco's slides...*

After current p20 production run

for now: temp servers looking at `_old`

rebuild servers with cxoracle

Merger `Im_access` and production farm servers

down to 2 instances?

change to C++? Sounds like not required