

RESOURCES  
SOFTWARE AND TECHNOLOGIES  
STATUS OF DATA IN DB  
OVERALL DATA EXPORT STATUS

# OPERA DATABASE EXPORT AND PRESERVATION

# RESOURCES

Physical machine received at CCIN2P3 with 2 TB disk

- Dedicated to OPERA for 2016/2017 for Oracle DB dump
- Not part of Linux batch clusters
- DB performance @CCIN2P3 worse than expected, investigation going on

Account activated at CERN for data preservation

- Access to EOS (disk) and CASTOR (tape) granted
- Data transmission using scp

# SOFTWARE AND TECHNOLOGIES

OracleDumpManager (.NET/Mono exe)

Set of bash scripts

Full chain activated with a single command or event list

Input format:

```
BRICK EVENT ID_FEEDBACK_OPERATION  
1110927 23352405 1000000033761949  
1115821 23391457 1000000033765661
```

Notice that many events have multiple feedbacks. Normally the latest one is the best, but laboratories are responsible for final decision.

Notice the ID refers to ID\_PROCESSOPERATION in VW\_FEEDBACK\_RECONSTRUCTIONS, not to ID\_RECONSTRUCTION

Mass export to CERN started with SALERNO data

Performances better than expected!

# SOFTWARE AND TECHNOLOGIES

Check data completeness:

DBEX\_EXPORT\_READY\_CHECK1 (ds\_any\_done > 0 and isvol > 0 and isrec > 0)

DBEX\_EXPORT\_READY\_CHECK2

CHECK THAT ALL DATA have been published (the two views above only check that “some” data are ready)

+ CHECK CHARM/TAU/NUE FLAGS!

EVERY LABORATORY IS RESPONSIBLE FOR CORRECTNESS AND COMPLETENESS OF ITS OWN DATA

# SOFTWARE AND TECHNOLOGIES

## Guidelines for data export:

DAQ FRAMEWORK	RECOMMENDATION
SYSAL	None
FEDRA	<ul style="list-style-type: none"><li>• Move ROOT files to LNGS</li><li>• Use new script by Valeri for DB data upload</li><li>• If calibration data are reused for TotalScan, make sure they are explicitly referenced in a volume or add VolumeScan operation (see next slides)</li><li>• <b>Maintenance on OPITA in these days, wait for communication</b></li></ul>
JAPANESE	??? No data have been declared ready yet

DB partitions for Dubna, Lebedev and MSU missing on OPITA

Need to be created – but it's not trivial at this stage

Reorganization on OPITA should take a week or two

**Don't publish anything through OPITA until maintenance is complete**

# STATUS OF DATA IN DB

Special event tagging: charm (24?) →

Special event tagging: tau (2?)

BRICK	EVENT
1046908	11149005385
1041378	11153019247

BRICK	EVENT
1034730	180718369
1065097	222007691
1127653	222274169
1014653	228197639
1079117	228563573
1048057	233225467
1140875	233478285
1044354	234276347
1027222	234341013
1085405	234654975
1110205	9152034063
1150444	9153055713
1118858	9189079481
1066404	9214106181
1078815	9300015673
1059278	9317000655
1142664	10134047875
1078815	10248000869
1082561	10270021561
1107689	10279009269
1037545	10297040393
1073614	11121000565
1020518	11121035135
1077152	11143018505
1035653	12123033341

# STATUS OF DATA IN DB

## CS publication statistics

DBEX\_CS\_PUBLICATION\_STATUS – no change since Oct16

RUNYEAR	LAB	ASSIGNED	FLAGSRECEIVED	DATARECEIVED
2007	LNGS	1	1	0
2007	Nagoya	4	3	0
2008	LNGS	1406	1359	805
2008	Nagoya	1330	1301	654
2009	LNGS	2794	2735	1563
2009	Nagoya	2962	2869	1436
2010	LNGS	3069	2894	1553
2010	Nagoya	2987	2887	1544
2011	LNGS	3561	3336	1297
2011	Nagoya	3303	3164	1603
2012	LNGS	2513	2373	986
2012	Nagoya	2447	2345	954

# STATUS OF DATA IN DB

## Located events, no volume data available

**DBEX\_LOCATED\_NOTSDATA** (located > 0 and deadmaterial = 0 and isvol = 0)

LABORATORY	BRICKS(Oct16)	BRICKS(Mar17)
ANKARA	21	21
BARI	59	54
BERN	952	952
BOLOGNA-PADOVA	127	74
DUBNA	32	32
FRASCATI	21	21
LEBEDEV	27	27
NAGOYA	359	364
NAPOLI	523	521
ROMA	12	12
SALERNO	67	67
SINP-MSU	8	8

Part of these is due to missing OPITA-OPFRA sync, i.e. published on OPITA but not sync'ed to OPFRA – should be published again to OPFRA

Some «located» events are not «decaysearched» hence not published yet, but that's not all



# STATUS OF DATA IN DB

## Decaysearched events, no volume data available

DBEX\_DECAYSEARCH\_NOTSDATA (located > 0 and ds\_any\_done > 0 and isvol = 0)

LABORATORY	BRICKS(Oct16)	BRICKS(Mar17)
ANKARA	13	13
BARI	28	23
BERN	890	890
BOLOGNA-PADOVA	92	68
DUBNA	28	28
FRASCATI	20	20
LEBEDEV	20	20
NAGOYA	127	127
NAPOLI	480	478
ROMA	7	7
SALERNO	21	21
SINP-MSU	3	3

Publication not done or incomplete transfer

# STATUS OF DATA IN DB

## Decaysearched events, no feedback

**DBEX\_DECAYSEARCH\_NOFEEDBACK** (located > 0 and ds\_any\_done > 0 and isrec = 0)

LABORATORY	BRICKS(Oct16)	BRICKS(Mar17)
ANKARA	5	5
BARI	8	4
BERN	428	428
BOLOGNA-PADOVA	30	7
DUBNA	3	2
FRASCATI	9	9
LEBEDEV	4	4
NAGOYA	121	121
NAPOLI	24	5
SALERNO	3	3

Publication not done or incomplete transfer

# STATUS OF DATA IN DB

## Apparently export-ready events

**DBEX\_EXPORT\_READY\_CHECK1** (`ds_any_done > 0 and isvol > 0 and isrec > 0`)

LABORATORY	BRICKS(Oct16)	BRICKS(Mar17)
ANKARA	22	22
BARI	289	294
BERN	311	311
BOLOGNA-PADOVA	317	357
FRASCATI	42	42
LEBEDEV	6	6
NAGOYA	2944	2944
NAPOLI	196	201
ROMA	62	63
SALERNO	478	478
SINP-MSU	15	15

This check alone is not sufficient, see more in the next slides

# STATUS OF DATA IN DB

## Probably export-ready events

### DBEX\_EXPORT\_READY\_CHECK2

(DS primary vertex location is contained in a TS volume at least 5×5 mm<sup>2</sup>)

LABORATORY	DECAYSEARCHED(Oct16)	TSAVAILABLE(Oct16)	DECAYSEARCHED(Mar17)	TSAVAILABLE(Mar17)
ANKARA	35	15	35	15
BARI	317	278	317	283
BERN	1262	108	1262	108
BOLOGNA-PADOVA	428	279	430	313
DUBNA	28	0	28	0
FRASCATI	64	16	64	16
LEBEDEV	26	0	26	0
NAGOYA	3080	2887	3080	2887
NAPOLI	677	72	680	73
ROMA	69	59	70	60
SALERNO	500	463	500	464
SINP-MSU	18	5	18	5

Also this check alone is not sufficient

# STATUS OF DATA IN DB

## Incomplete data transfers

### DBEX\_INVALID\_DATASETS

LABORATORY	DATASETS(Oct16)	DATASETS(Mar17)
ANKARA	27	27
BARI	8	8
BERN	11	11
BOLOGNA-PADOVA	37	37
DUBNA	6	6
LYON	2	2
LNGS	13	13
ROMA	18	18
SALERNO	22	13
SINP-MSU	13	22

Interrupted transfer - data need to be deleted and published again

# OVERALL DATA EXPORT STATUS

## Overall expectations and status

LABORATORY	DECAYSEARCHED	READY FOR EXPORT	EXPORTED
ANKARA	35	0	0
BARI	317	0	0
BERN	1262	3	0
BOLOGNA-PADOVA	430	0	0
DUBNA	28	0	0
FRASCATI	64	0	0
LEBEDEV	26	0	0
NAGOYA	3080	0	0
NAPOLI	680	2	0
ROMA	70	22	0
SALERNO	500	441	302
SINP-MSU	18	0	0
<b>ALL</b>	<b>6510</b>	<b>468</b>	<b>302</b>

302 events exported in 1 week

About 21 more weeks to export all datasets

Laboratory feedback needed to keep the pace!!!

Data must be DECLARED READY by laboratory responsible