



Monitoring for CCRC08, status and plans

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Monitoring of VO critical services



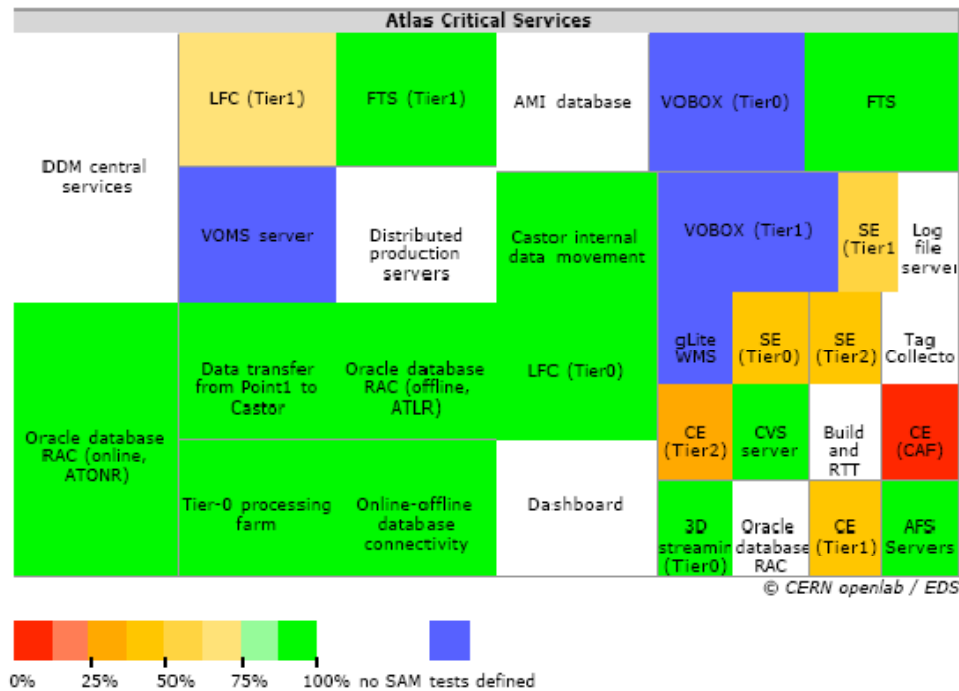
- Critical Services "GridMap" is becoming more informative, in particular regarding test status part.

Best example is ATLAS



Still there is a big room for improvements (a lot of white and blue colours, which should gradually disappear)

Test Status (live data)



CERN-PROD TRIUMF-LCG2 IN2P3-CC FZK-LCG2 INFN-T1 SARA-MATRIX NDGF-T1
pic Taiwan-LCG2 RAL-LCG2 BNL-LCG2 USCMS-FNAL-WC1



Site monitoring



- Experiments are using SAM framework for monitoring services at the sites

Central repository of test results, possibility to use this information for global monitoring view

for all 4 experiments (example “Critical Services GridMap”)

- Publishing of the test results into site fabric monitoring is in progress



Site monitoring



- New applications for site monitoring developed in CMS and demonstrated during CMS week, among them:
 - Site Status Board (CMS)

Shows whether site is in BDII, site scheduled downtime, status of the CE and SE defined via results of CMS specific tests, CMS JobRobot jobs efficiency at the site, status of analysis and production, number of commissioned transfer links, status of ongoing transfers, software tags published at the site, etc...

Flexible, allows to publish new metrics

Site Status for the CMS sites

Put the mouse over any column header to get the description of the column.
Clicking on a column header will open a page giving information about the column.
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Site Name	Visible	JobRobot	SAM T CE
T0_CH_CERN	n/a	The site is visible in the BDII (last update: 2008-03-04 10:00:00)	n/a
T1_CH_CERN	n/a	100%(439)	n/a
T1_DE_FZK	OK	96%(22)	OK
T1_ES_PIC	OK	96%(23)	OK
T1_FR_CCN2P3	OK	pend	OK
T1_IT_CNAF	OK	100%(124)	OK
T1_TW_ASGC	OK	87%(34)	OK
T1_UK_RAL	OK	pend	OK
T1_US_FNAL	warning 2/3	72%(470)	OK
T2_AT_Vienna	OK	100%(143)	OK
T2_BE_IHHE	OK	100%(240)	OK
T2_BE_UCL	OK	100%(230)	OK
T2_BR_SPRACE	OK	n/a	error
T2_BR_UERJ	OK	n/a	error
T2_CH_CSCS	error	85%(371)	error
T2_CN_Beijing	OK	100%(144)	OK
T2_CN_PKU	n/a	n/a	n/a
T2_DE_DESY	OK	pend	OK
T2_DE_RWTH	OK	100%(26)	OK
T2_EE_Estonia	OK	100%(26)	error

...cms updating it (still to be implemented)

Open issues	Maintenance	Artems Happy faces
n/a	GOCDB-info	
n/a	GOCDB-info	
n/a	GOCDB-info	
n/a	GOCDB-info	
n/a	GOCDB-info	
n/a	GOCDB-info	
n/a	GOCDB-info	
n/a	GOCDB-info	
n/a	OSG-downtime	
n/a	GOCDB-info	
n/a	GOCDB-info	
n/a	OSG-downtime	
n/a	GOCDB-info	
n/a	GOCDB-info	
n/a	OSG-downtime	
n/a	GOCDB-info	
n/a	GOCDB-info	
n/a	GOCDB-info	



- For this kind of monitoring experiments are mainly relying on the experiment specific monitoring systems, like Experiment Dashboards, Phedex, Dirac, ALICE Monalisa repository.
- Serve well the needs of the experiments
- **No central repository for monitoring data, no common way of browsing this information. For someone who is not a part of the experiment or even a given activity in the experiment it is difficult to find needed information.**



ATLAS Dashboard for shifters as an example of use of the Experiment Dashboard during CCRC08 and beyond



- Both DDM and ProdSys Dashboards had been intensively used by shifters and taken as a main source of information for people taking shifts during CCRC08

ATLAS Shifter's Workbook:

<https://twiki.cern.ch/twiki/bin/view/Atlas/ADCoS>

- Very positive feedback from people taking shifts
- New features like 'shifter's quick view', integration of ticketing systems with the dashboards, shifter's daily report covering open issuers for the next shifter...
- Live demo of the new features during ATLAS workshop last week



Need for a global view of the experiments workflows (all 4 experiments in a consistent way)



- Is needed for people running infrastructure
 - to understand whether experiments are able to reach their targets
 - to notice the problem asap
 - when everything goes fine – show it!
 - the same resources are shared between 4 VO, need to be able to see correlations if any
- Is needed for site administrators, in particular for sites serving several VOs
- For experiments, despite the fact that they rely on their specific monitoring
 - Correlations. Performance for a given activity had dropped, may be it is related to the activity of other experiments?

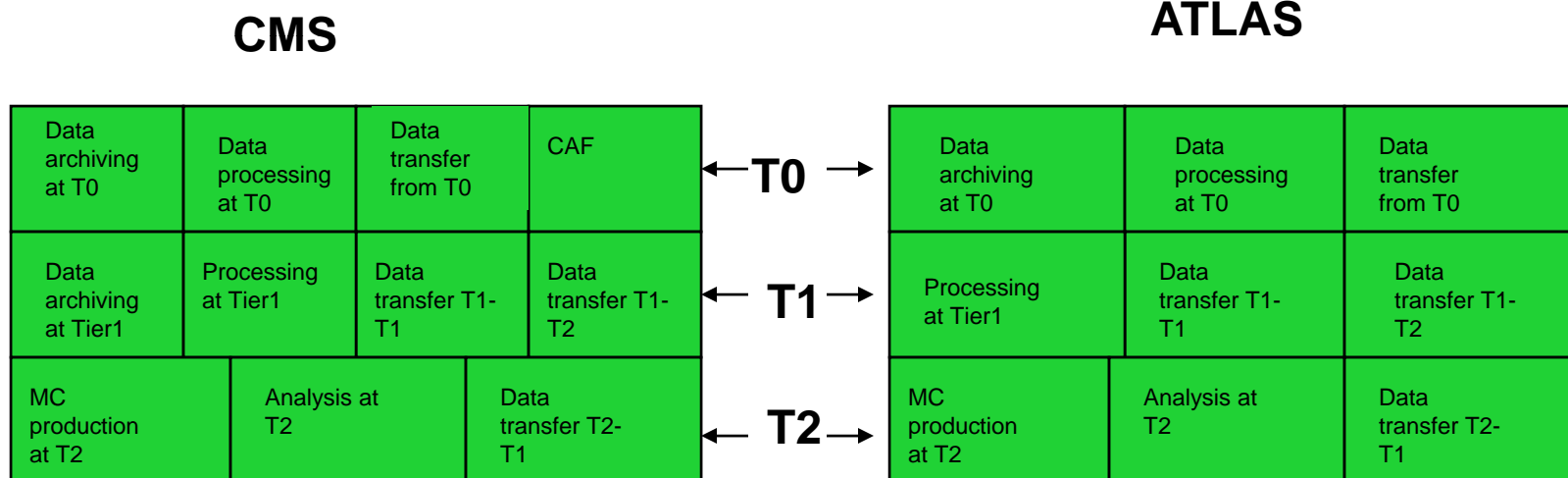


Functional blocks have much in common



- Functional blocks for LHC experiments are similar to a large extent

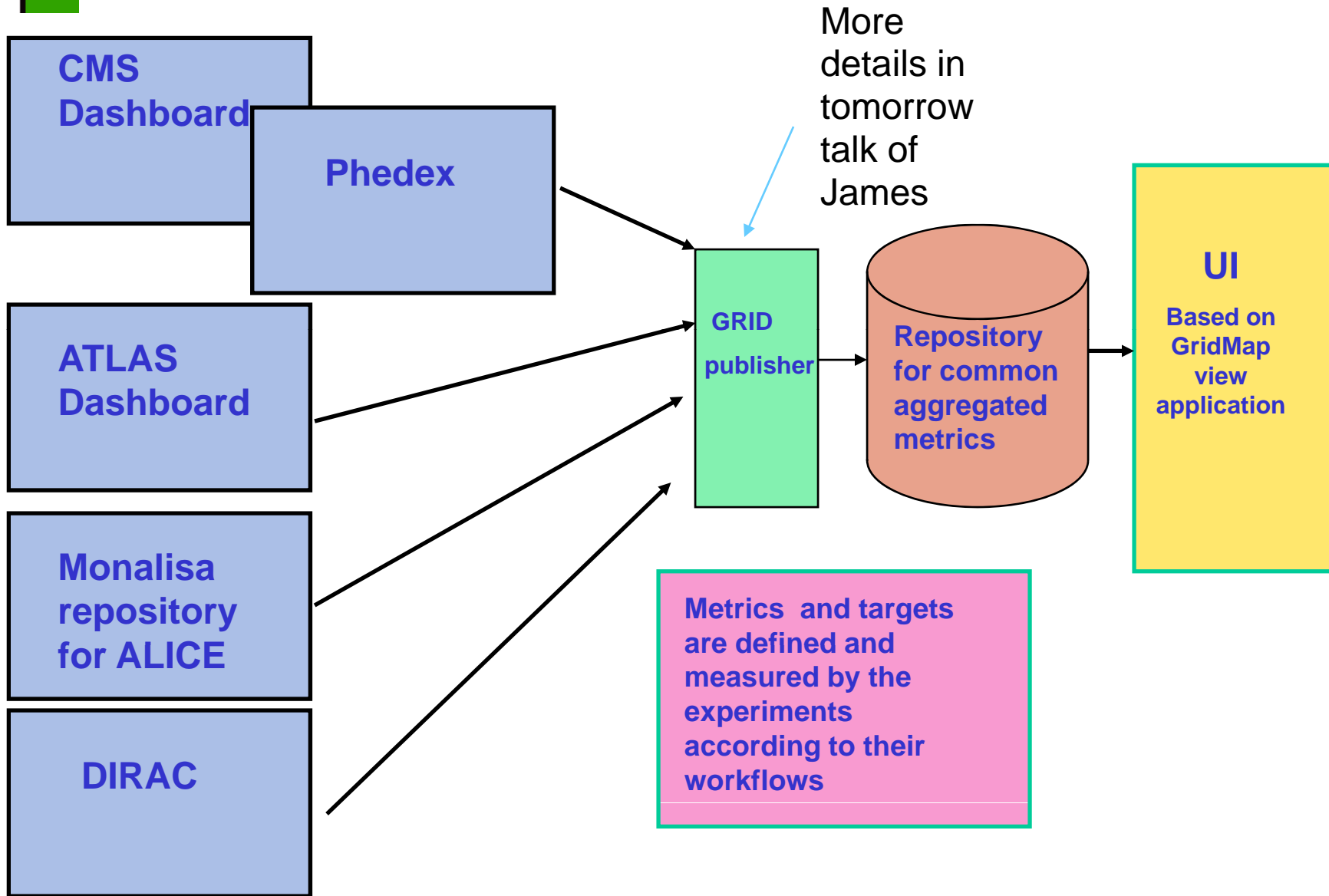
Example - functional blocks for ATLAS and CMS for CCRC08:



A lot of simple metrics like transfer throughput, number of jobs running in parallel, success rate calculated as number of successes divided by number of attempts are also similar

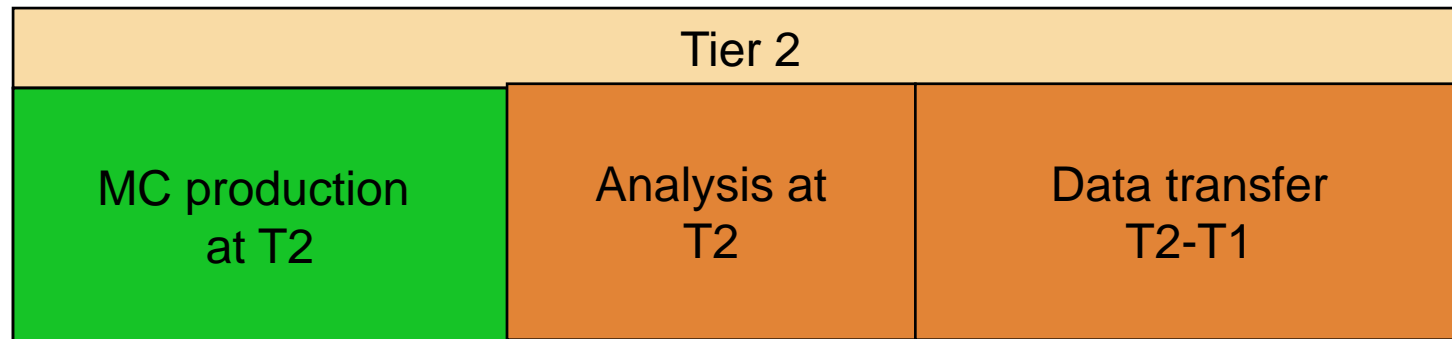
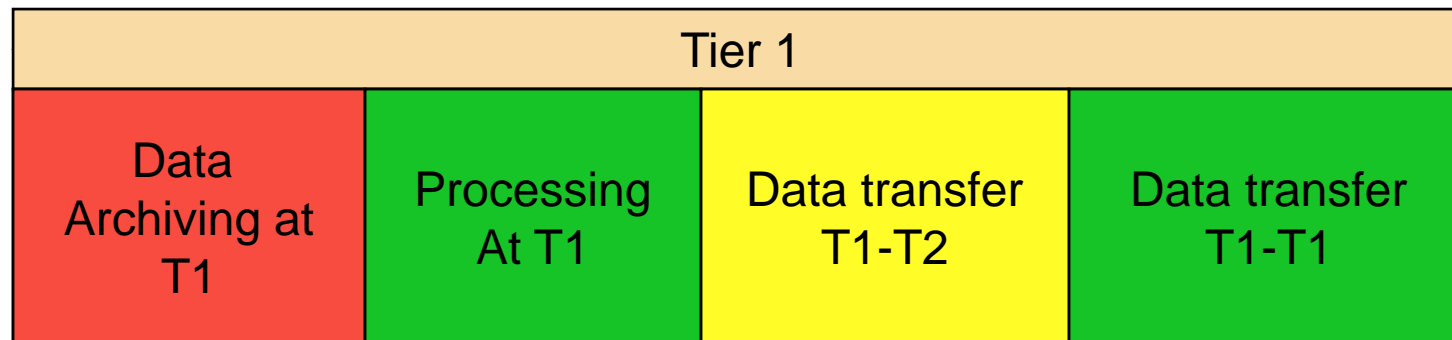


Monitoring of the Experiments workflows



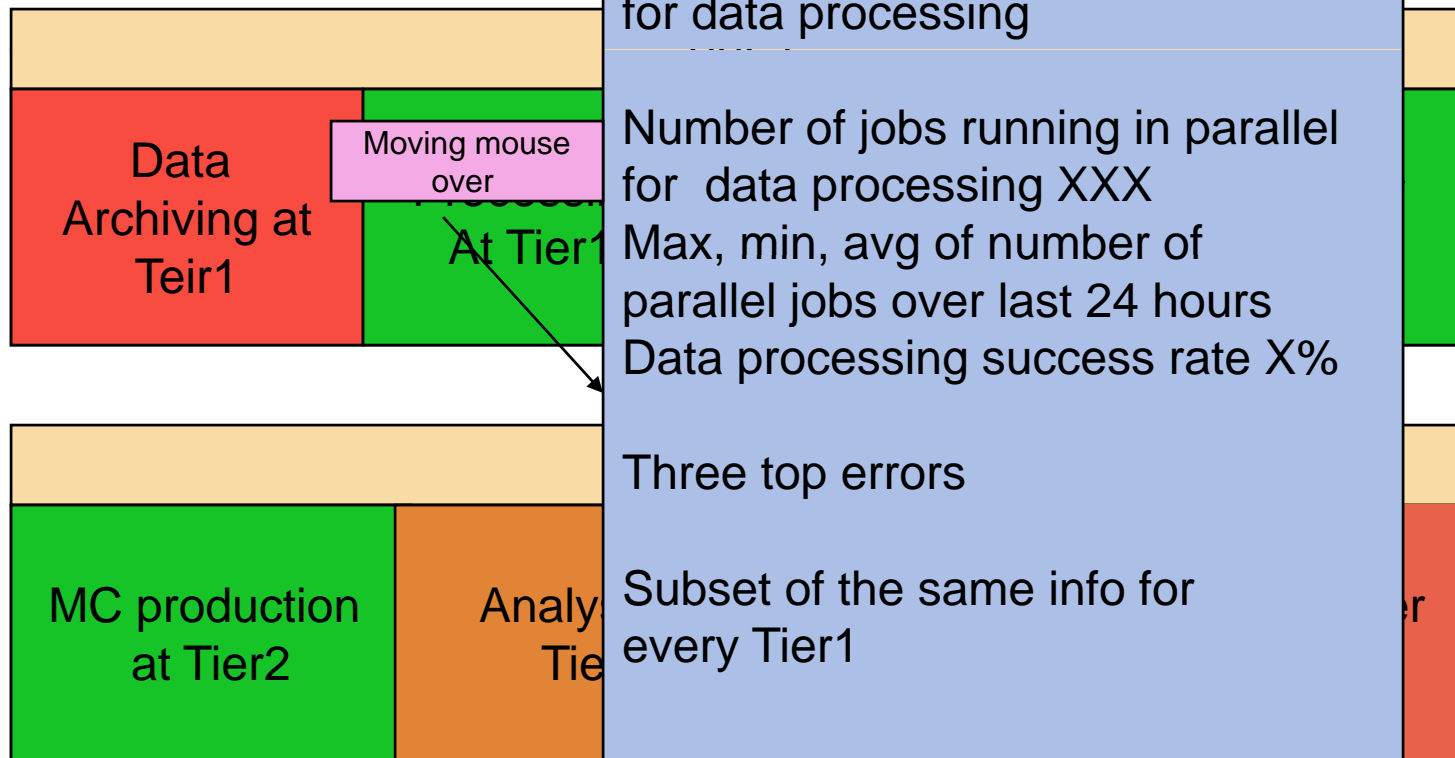
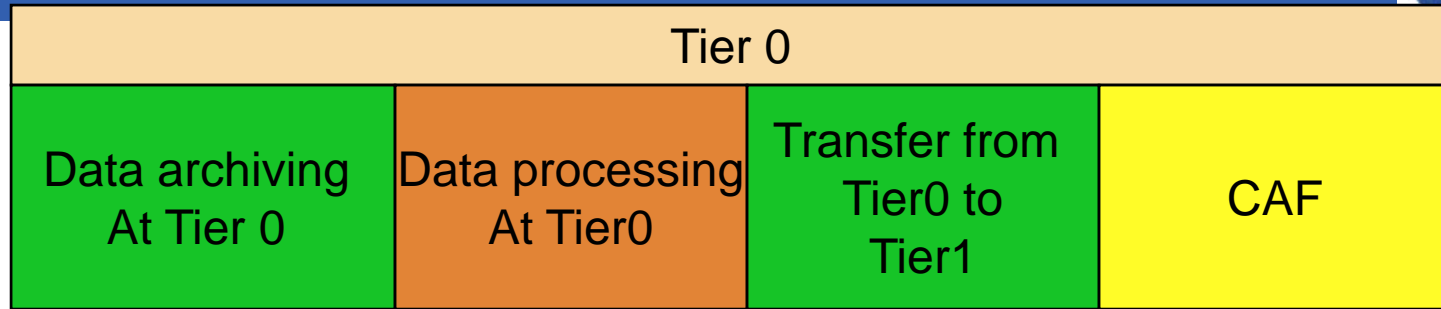


Example of "Gridmap" visualisation for CCRC08 workflow for CMS (random choice of colour)



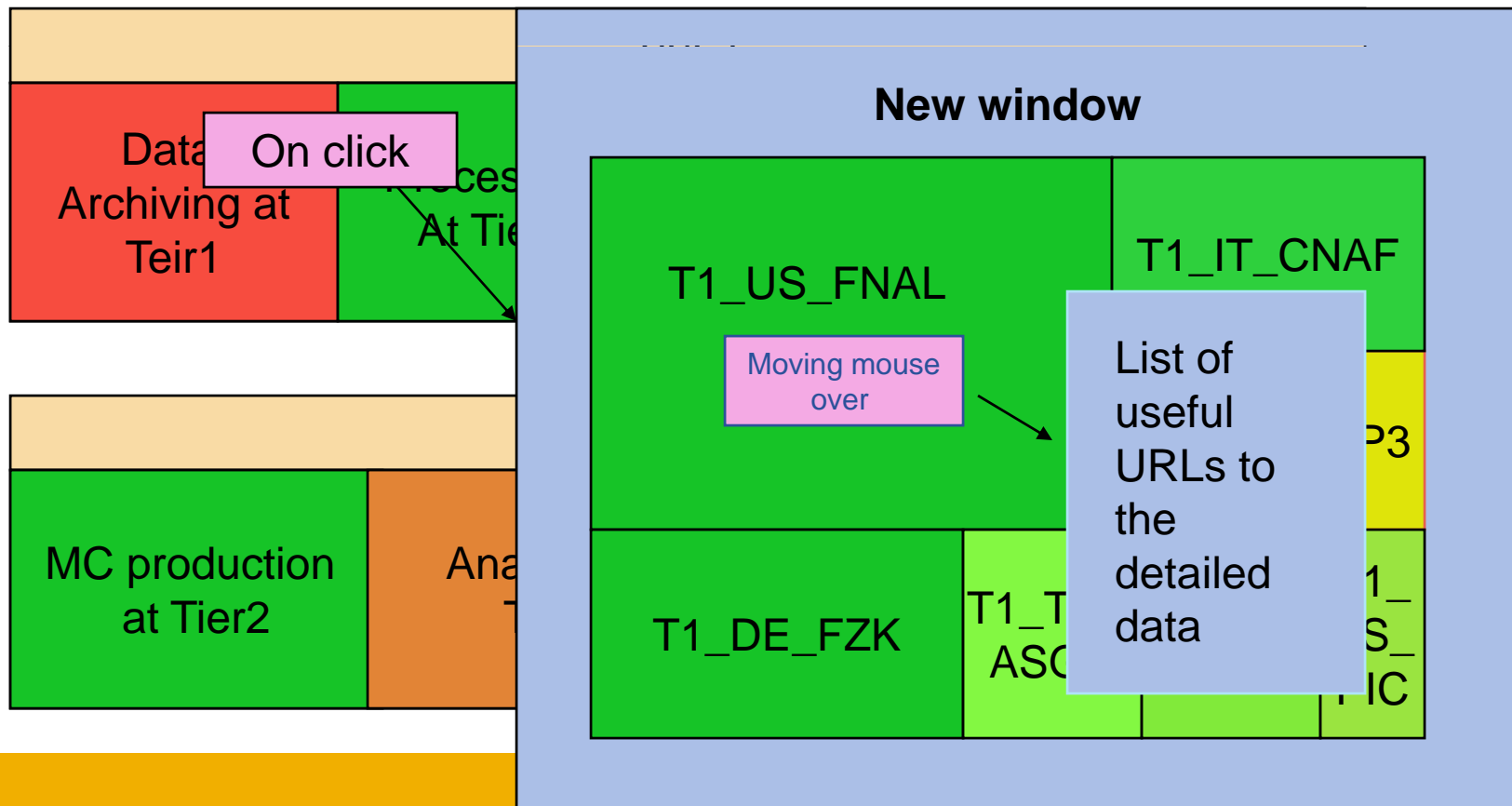
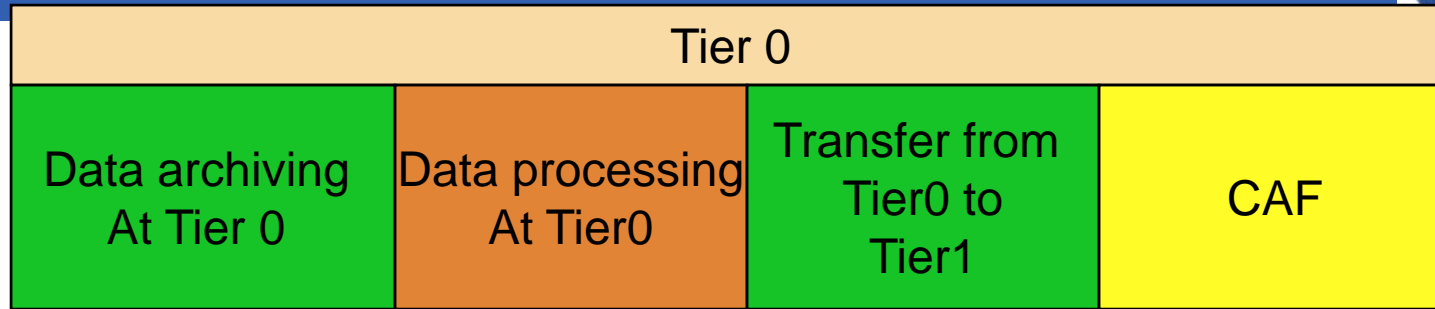


Example of "Gridmap" visualisation for CCRC08 workflow for CMS (random choice of colour)





GridMap view example for CCRC08 CMS (random choice for colours, no real data)





Possible to derive global view or plot for a given metrics or activity for all 4 LHC experiments (per site, per tier, overall)

