

# STATUS REPORT ON TRIGGER EDM ISSUES

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## OUTLINE

- Trigger converters to be supported for backward compatibility in BS files
- Optimization of Trigger TP converters

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## BACKWARD COMPATIBILITY IN 16.5 AND BEYOND

- New policy on backward compatibility
  - [https://twiki.cern.ch/twiki/bin/viewauth/Atlas/ForwardBackwardCompatibility#First\\_implementation](https://twiki.cern.ch/twiki/bin/viewauth/Atlas/ForwardBackwardCompatibility#First_implementation)
  - “First Implementation” endorsed by TOB on 15<sup>th</sup> November
- From release 16.3.0 and 16.5.0 onwards (November 2010) we would only maintain the capability to:
  - read raw data BS from fall 2008 (large cosmics data taking)
  - capability to read trigger information in BS requires the capability to read the persistent version of some offline EDM classes
    - this data was taken with ATLAS P1HLT 14.2.21.1 14.2.21.5 14.2.21.6 14.2.21.8 14.2.21.9 14.2.23.1 14.2.23.2 14.2.23.3
  - Need to provide full list of classes that should be maintained

## TRIGGER CLASSES FOR NEW BW COMPATIBILITY

- In order to provide a full list of Trigger classes needed for BW compat we need to merge the full list of Trigger persistent classes in BS in all releases to be supported
  - Starting from recent 16.X down to 14.2.21.1
- Preliminary list of classes is available on TriggerEDM twiki
  - <https://twiki.cern.ch/twiki/bin/viewauth/Atlas/PreliminaryListOfConvertersForTriggerBWCompatibility>
  - This is a “very minimal” list of converters
    - 208 total classes so far
  - Started looking into a complete list
    - Plan to have it done by end of next week

## (VERY) FIRST LOOK AT CLASSES TO BE DROPPED

- Haven't yet checked for releases prior to 2008
- Looking at differences between 14.2.23.3 and today
  - Take for example the following 8/230 classes
    - CaloTowerContainer\_p1; TrigInDetTrackFitPar\_p2;  
TrigMuonEFInfoContainer\_p1; TrigMuonEFInfoContainer\_tlp1;  
TrigMuonEFInfo\_p1; TrigMuonEFTrack\_p1;  
egDetailContainer\_p1; egammaContainer\_p1;
  - We could probably drop support for only 1 class (TrigInDetTrackFitPar\_p1), if this is NOT used in releases between 14.2.23.3 and 14.2.21.1
  - 20 more classes have a version different than 1 in rel 14
    - Part of the code in these classes may be removed
    - For some of this classes, there might be versions obtained with older converter that could be dropped

## OPTIMIZATION OF TRIGGER TP CONVERTERS

- Since Summer 2010 a lot of work has gone into updating several of the persistent classes for the Trigger EDM in order to be more efficient in terms of space occupied and CPU time needed at run time
  - Many thanks to Ilija for his help in identifying the classes to be changed
- ~50% of the TP converters have already been modified
  - Full list at <https://twiki.cern.ch/twiki/bin/viewauth/Atlas/PersistentClassesOptimization>
  - More help being sought within Trigger community to complete the work in time for Feb 2011

## CONCLUSIONS

- Full list of Trigger classes to be supported for backward compatibility from 16.5 onwards being compiled
  - Aim to have a complete list by end of next week
  
- Optimization of Trigger TP Converters on going
  - More help will be available from within Trigger community
  - Plan to have it ready for Feb 2011 release