

# RAW OCDB for MC - MUON -

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# MCH aka MUON Tracker

table from <https://twiki.cern.ch/twiki/pub/ALICE/PWG3Muon> -> «OCDB settings for realistic simulations»  
case without rejectlist, i.e. valid for anchor runs

Object	Sim	Rec
Capacitances	not used (1)	not used (1)
Gain	IDEAL (1)	
Config	not used	RAW
HV	not used	RAW
MappingData	RAW	RAW
MappingRunData	not used	RAW
Neighbours	not used	RAW
OccupancyMap	not used	RAW
Pedestals	RAW	RAW
RecoParam	not used	RAW
RejectList	not used	RAW
Align/Data	IDEAL	RESIDUAL

(1) right now at least

# MCH not-yet-from-raw objects

- Alignment
  - we simulate with ideal geometry
  - we reconstruct simulation with residual alignment
  - what would it take to simulate with real geometry (e.g. # of overlaps) ?  
Don't know yet
  - but still would need a residual misalignment to account for alignment imprecisions...
- Gain/Capa
  - here the problem is to know how to decalibrate (at simulation stage) based on the reco params
  - but do we want to introduce dependence of simulation on reco params ? Probably not...
  - could probably detect whether gain has been used during simulation or not, but only from digits (i.e. would not work when simulation goes all the way to raw)

# MTR aka MUON Trigger

table from <https://twiki.cern.ch/twiki/pub/ALICE/PWG3Muon> -> «OCDB settings for realistic simulations»  
case with trigger efficiency, as the other one is not optimal at all...

Object	Sim	Rec
GlobalTriggerCrateConfig	IDEAL/RESIDUAL/FULL	IDEAL/RESIDUAL/FULL
LocalTriggerBoardMasks	IDEAL/RESIDUAL/FULL	IDEAL/RESIDUAL/FULL
RegionalTriggerConfig	IDEAL/RESIDUAL/FULL	IDEAL/RESIDUAL/FULL
TriggerDCS	not used	RAW
TriggerEfficiency	FULL	not used
TriggerLut	RAW	RAW

# MTR not-yet-from-raw objects

- Trigger masks (local, regional, global level)
  - trigger efficiency already account for masked channels: plugging measured efficiency AND real masks would result in a double counting
- Trigger efficiency (used only during simulation)
  - An option here would be to :
    - correct the trigger chamber efficiency (from the PWG I task) with the information from the trigger config.
    - put the corrected efficiency in the raw OCDB
    - use it in simulations TOGETHER WITH the real masks
  - With this option: no more specific storages needed (but it has to be implemented and tested first)