

Table of Contents

Goal.....	1
Monte-Carlo based release validation.....	1
Trigger turn-on curves.....	1
Reconstruction performance.....	2
Data-like monitoring.....	2
Local reconstruction performance.....	2
Data based release validation.....	2

Goal

This twiki documents the release validation mechanism for the muon trigger software. The release validation is performed primarily with Monte-Carlo samples. Real data is also foreseen to be used for muon trigger release validation.

It also provides instructions to run the validation or is linking to it.

Monte-Carlo based release validation

All the plots reported in summary pdf files below are available at

- <https://cmsweb.cern.ch/dqm/relval>

as described in the schematic below

Release Validation : DQM gui

Web interface
<https://cmsweb.cern.ch/dqm/relval>

- Select “Everything” Workspace
- Select dataset
- Scroll down to HLT/Muon
- Select trigger path
- View histograms

The screenshot shows the DQM GUI interface. At the top, there's a 'Workspace' dropdown set to 'Summary, 1 /'. Below it, there are tabs for 'Summaries' and 'Other', with 'Everything' selected under 'Other'. A list of 'Objects' is shown, including 'HLT', 'ALCaEcalPIO', 'HLTEgammaValidation', 'HLTTAU', 'Muon', 'Top', and 'HcalHitsV'. The 'Muon' object is expanded to show 'HLT_L1Mu', 'HLT_L1MuOpen', 'HLT_L2Mu9', 'HLT_Mu3', 'HLT_Mu5', and 'HLT_Mu7'. The 'HLT_Mu3' object is selected, and a histogram plot is displayed. The plot is titled 'genEffEta_L3PreFiltered' and shows 'Efficiency label=L3PreFiltered'. The y-axis is 'L3 Pass/L1 Pass (%)' and the x-axis is 'Generated Muon η '. The plot shows a distribution of points with a mean of 0.8198 and an RMS of 1.227. A blue box highlights a 'Spotted issue in 3.0.0.pre7' on the plot.

The features reported by the different release validation sources are reported here, so are the major changes that happen to the muon triggers software and configuration.

Trigger turn-on curves

The package allowing the validation of the release in terms of trigger turn-on is described here and results are reported at

- <http://cern.ch/cms-muonhltval/>

Reconstruction performance

The suite of software used to perform the validation of a release in terms of reconstruction performance is described here and results are reported at:

- <http://cmsdoc.cern.ch/cms/Physics/muon/CMSSW/Performance/RecoMuon/Validation/val/>

Data-like monitoring

The online and offline muon trigger dqm are foreseen to be ran as part of the standard monte carlo based release validation. The plots from the online

Local reconstruction performance

Local reconstruction release validation module from offline reconstruction release validation are foreseen to be used to validate the local reconstruction on a release per release basis.

Data based release validation

The online and offline muon trigger dqm are foreseen to be ran as the beta version of the data based release validation.

-- JeanrochVlimant - 30 Jun 2009

This topic: CMSPublic > SWGuideMuonHLTRelVal

Topic revision: r1 - 2009-06-30 - JeanrochVlimant



Copyright &© 2008-2020 by the contributing authors. All material on this collaboration platform is the property of the contributing authors.

Ideas, requests, problems regarding TWiki? Send feedback