Front-end

Analysis

analysisID

string: descriptionOfOriginalAnalysis

list<User>: subscribers

Model

modelID

string: descriptionOfModel

User

userID string: name

string: email

API

RequestNotification

scanRequestID

string: descriptionOfOriginalAnalysis

string: descriptionOfModel

string: descriptionOfRecastPotential

ScanRequest

list<PointRequests>: scanPoints list<string>: parameters string: description of model

scanRequestID analysisID modelID

userID: requester userID: responder

ScanResponse

list<PointResponse>: scanResponse scanRequestID analysisID

PointRequest

list<ElementRequest>: requests map<string,double>: parmeterPoint pointRequestID

analysisID modelID

userID: requester

PointResponse

list<BasicResponse>: basicAnswers double: lumiWeightedEfficiency

double: totalLuminosity

modelID

double: lower1sigLimitOnCrossSectionWrtReference double: upper1sigLimitOnCrossSectionWrtReference double: lower2sigLimitOnCrossSectionWrtReference double: upper2sigLimitOnCrossSectionWrtReference TH1* (optional): mergedSignalTemplateWrtReference

double: logLikelihoodAtReference

pointRequestID analysisID modelID

BasicRequest

LHE file: signal events int: numberOfEvents

double: referenceCrossSection string: conditions description

basicRequestID analysisID modelID

userID: requester

BasicResponse

double: overallEfficiency double: nominalLuminosity

double: lower1sigLimitOnCrossSection double: upper1sigLimitOnCrossSection double: lower2sigLimitOnCrossSection double: upper2sigLimitOnCrossSection

double: lower1sigLimitOnRate double: upper1sigLimitOnRate double: lower2sigLimitOnRate double: upper2sigLimitOnRate TH1* (optional): signalTemplate double: logLikelihoodAtReference double: referenceCrossSection

basicRequestID analysisID modelID

PointProcessingTask

Back-end

process(PointRequest): PointResponse

Note: associated to basic processing tasks, but the process method may need additional information that is not contained in BasicResponse.

BasicProcessingTask

process(BasicRequest): BasicResponse

Note: basic processing tasks can work independently.