package com.twitter.cr\_mixer.param

import com.twitter.finagle.stats.NullStatsReceiver

import com.twitter.logging.Logger

import com.twitter.simclusters\_v2.thriftscala.{EmbeddingType => SimClustersEmbeddingType}

import com.twitter.timelines.configapi.BaseConfig

import com.twitter.timelines.configapi.BaseConfigBuilder

import com.twitter.timelines.configapi.FSBoundedParam

import com.twitter.timelines.configapi.FSEnumParam

import com.twitter.timelines.configapi.FSName

import com.twitter.timelines.configapi.FSParam

import com.twitter.timelines.configapi.FeatureSwitchOverrideUtil

import com.twitter.timelines.configapi.Param

object InterestedInParams {

object SourceEmbedding extends Enumeration {

protected case class EmbeddingType(embeddingType: SimClustersEmbeddingType) extends super.Val

import scala.language.implicitConversions

implicit def valueToEmbeddingtype(x: Value): EmbeddingType = x.asInstanceOf[EmbeddingType]

val UserInterestedIn: Value = EmbeddingType(SimClustersEmbeddingType.FilteredUserInterestedIn)

val UnfilteredUserInterestedIn: Value = EmbeddingType(

SimClustersEmbeddingType.UnfilteredUserInterestedIn)

val FromProducerEmbedding: Value = EmbeddingType(

SimClustersEmbeddingType.FilteredUserInterestedInFromPE)

val LogFavBasedUserInterestedInFromAPE: Value = EmbeddingType(

SimClustersEmbeddingType.LogFavBasedUserInterestedInFromAPE)

val FollowBasedUserInterestedInFromAPE: Value = EmbeddingType(

SimClustersEmbeddingType.FollowBasedUserInterestedInFromAPE)

val UserNextInterestedIn: Value = EmbeddingType(SimClustersEmbeddingType.UserNextInterestedIn)

// AddressBook based InterestedIn

val LogFavBasedUserInterestedAverageAddressBookFromIIAPE: Value = EmbeddingType(

SimClustersEmbeddingType.LogFavBasedUserInterestedAverageAddressBookFromIIAPE)

val LogFavBasedUserInterestedMaxpoolingAddressBookFromIIAPE: Value = EmbeddingType(

SimClustersEmbeddingType.LogFavBasedUserInterestedMaxpoolingAddressBookFromIIAPE)

val LogFavBasedUserInterestedBooktypeMaxpoolingAddressBookFromIIAPE: Value = EmbeddingType(

SimClustersEmbeddingType.LogFavBasedUserInterestedBooktypeMaxpoolingAddressBookFromIIAPE)

val LogFavBasedUserInterestedLargestDimMaxpoolingAddressBookFromIIAPE: Value = EmbeddingType(

SimClustersEmbeddingType.LogFavBasedUserInterestedLargestDimMaxpoolingAddressBookFromIIAPE)

val LogFavBasedUserInterestedLouvainMaxpoolingAddressBookFromIIAPE: Value = EmbeddingType(

SimClustersEmbeddingType.LogFavBasedUserInterestedLouvainMaxpoolingAddressBookFromIIAPE)

val LogFavBasedUserInterestedConnectedMaxpoolingAddressBookFromIIAPE: Value = EmbeddingType(

SimClustersEmbeddingType.LogFavBasedUserInterestedConnectedMaxpoolingAddressBookFromIIAPE)

}

object EnableSourceParam

extends FSParam[Boolean](

name = "twistly\_interestedin\_enable\_source",

default = true

)

object InterestedInEmbeddingIdParam

extends FSEnumParam[SourceEmbedding.type](

name = "twistly\_interestedin\_embedding\_id",

default = SourceEmbedding.UnfilteredUserInterestedIn,

enum = SourceEmbedding

)

object MinScoreParam

extends FSBoundedParam[Double](

name = "twistly\_interestedin\_min\_score",

default = 0.072,

min = 0.0,

max = 1.0

)

object EnableSourceSequentialModelParam

extends FSParam[Boolean](

name = "twistly\_interestedin\_sequential\_model\_enable\_source",

default = false

)

object NextInterestedInEmbeddingIdParam

extends FSEnumParam[SourceEmbedding.type](

name = "twistly\_interestedin\_sequential\_model\_embedding\_id",

default = SourceEmbedding.UserNextInterestedIn,

enum = SourceEmbedding

)

object MinScoreSequentialModelParam

extends FSBoundedParam[Double](

name = "twistly\_interestedin\_sequential\_model\_min\_score",

default = 0.0,

min = 0.0,

max = 1.0

)

object EnableSourceAddressBookParam

extends FSParam[Boolean](

name = "twistly\_interestedin\_addressbook\_enable\_source",

default = false

)

object AddressBookInterestedInEmbeddingIdParam

extends FSEnumParam[SourceEmbedding.type](

name = "twistly\_interestedin\_addressbook\_embedding\_id",

default = SourceEmbedding.LogFavBasedUserInterestedLouvainMaxpoolingAddressBookFromIIAPE,

enum = SourceEmbedding

)

object MinScoreAddressBookParam

extends FSBoundedParam[Double](

name = "twistly\_interestedin\_addressbook\_min\_score",

default = 0.0,

min = 0.0,

max = 1.0

)

// Prod SimClusters ANN param

// This is used to enable/disable querying of production SANN service. Useful when experimenting

// with replacements to it.

object EnableProdSimClustersANNParam

extends FSParam[Boolean](

name = "twistly\_interestedin\_enable\_prod\_simclusters\_ann",

default = true

)

// Experimental SimClusters ANN params

object EnableExperimentalSimClustersANNParam

extends FSParam[Boolean](

name = "twistly\_interestedin\_enable\_experimental\_simclusters\_ann",

default = false

)

// SimClusters ANN 1 cluster params

object EnableSimClustersANN1Param

extends FSParam[Boolean](

name = "twistly\_interestedin\_enable\_simclusters\_ann\_1",

default = false

)

// SimClusters ANN 2 cluster params

object EnableSimClustersANN2Param

extends FSParam[Boolean](

name = "twistly\_interestedin\_enable\_simclusters\_ann\_2",

default = false

)

// SimClusters ANN 3 cluster params

object EnableSimClustersANN3Param

extends FSParam[Boolean](

name = "twistly\_interestedin\_enable\_simclusters\_ann\_3",

default = false

)

// SimClusters ANN 5 cluster params

object EnableSimClustersANN5Param

extends FSParam[Boolean](

name = "twistly\_interestedin\_enable\_simclusters\_ann\_5",

default = false

)

// SimClusters ANN 4 cluster params

object EnableSimClustersANN4Param

extends FSParam[Boolean](

name = "twistly\_interestedin\_enable\_simclusters\_ann\_4",

default = false

)

val AllParams: Seq[Param[\_] with FSName] = Seq(

EnableSourceParam,

EnableSourceSequentialModelParam,

EnableSourceAddressBookParam,

EnableProdSimClustersANNParam,

EnableExperimentalSimClustersANNParam,

EnableSimClustersANN1Param,

EnableSimClustersANN2Param,

EnableSimClustersANN3Param,

EnableSimClustersANN5Param,

EnableSimClustersANN4Param,

MinScoreParam,

MinScoreSequentialModelParam,

MinScoreAddressBookParam,

InterestedInEmbeddingIdParam,

NextInterestedInEmbeddingIdParam,

AddressBookInterestedInEmbeddingIdParam,

)

lazy val config: BaseConfig = {

val booleanOverrides = FeatureSwitchOverrideUtil.getBooleanFSOverrides(

EnableSourceParam,

EnableSourceSequentialModelParam,

EnableSourceAddressBookParam,

EnableProdSimClustersANNParam,

EnableExperimentalSimClustersANNParam,

EnableSimClustersANN1Param,

EnableSimClustersANN2Param,

EnableSimClustersANN3Param,

EnableSimClustersANN5Param,

EnableSimClustersANN4Param

)

val doubleOverrides = FeatureSwitchOverrideUtil.getBoundedDoubleFSOverrides(

MinScoreParam,

MinScoreSequentialModelParam,

MinScoreAddressBookParam)

val enumOverrides = FeatureSwitchOverrideUtil.getEnumFSOverrides(

NullStatsReceiver,

Logger(getClass),

InterestedInEmbeddingIdParam,

NextInterestedInEmbeddingIdParam,

AddressBookInterestedInEmbeddingIdParam

)

BaseConfigBuilder()

.set(booleanOverrides: \_\*)

.set(doubleOverrides: \_\*)

.set(enumOverrides: \_\*)

.build()

}

}