package com.twitter.representationscorer.modules

import com.google.inject.Provides

import com.twitter.conversions.DurationOps.\_

import com.twitter.inject.TwitterModule

import com.twitter.representation\_manager.config.ClientConfig

import com.twitter.representation\_manager.config.EnabledInMemoryCacheParams

import com.twitter.representation\_manager.config.InMemoryCacheParams

import com.twitter.simclusters\_v2.thriftscala.EmbeddingType

import com.twitter.simclusters\_v2.thriftscala.EmbeddingType.\_

import com.twitter.simclusters\_v2.thriftscala.ModelVersion

import com.twitter.simclusters\_v2.thriftscala.ModelVersion.\_

import javax.inject.Singleton

object RMSConfigModule extends TwitterModule {

def getCacheName(embedingType: EmbeddingType, modelVersion: ModelVersion): String =

s"${embedingType.name}\_${modelVersion.name}\_in\_mem\_cache"

@Singleton

@Provides

def providesRMSClientConfig: ClientConfig = {

val cacheParamsMap: Map[

(EmbeddingType, ModelVersion),

InMemoryCacheParams

] = Map(

// Tweet Embeddings

(LogFavBasedTweet, Model20m145k2020) -> EnabledInMemoryCacheParams(

ttl = 10.minutes,

maxKeys = 1048575, // 800MB

cacheName = getCacheName(LogFavBasedTweet, Model20m145k2020)),

(LogFavLongestL2EmbeddingTweet, Model20m145k2020) -> EnabledInMemoryCacheParams(

ttl = 5.minute,

maxKeys = 1048575, // 800MB

cacheName = getCacheName(LogFavLongestL2EmbeddingTweet, Model20m145k2020)),

// User - KnownFor Embeddings

(FavBasedProducer, Model20m145k2020) -> EnabledInMemoryCacheParams(

ttl = 1.day,

maxKeys = 500000, // 400MB

cacheName = getCacheName(FavBasedProducer, Model20m145k2020)),

// User - InterestedIn Embeddings

(LogFavBasedUserInterestedInFromAPE, Model20m145k2020) -> EnabledInMemoryCacheParams(

ttl = 6.hours,

maxKeys = 262143,

cacheName = getCacheName(LogFavBasedUserInterestedInFromAPE, Model20m145k2020)),

(FavBasedUserInterestedIn, Model20m145k2020) -> EnabledInMemoryCacheParams(

ttl = 6.hours,

maxKeys = 262143,

cacheName = getCacheName(FavBasedUserInterestedIn, Model20m145k2020)),

// Topic Embeddings

(FavTfgTopic, Model20m145k2020) -> EnabledInMemoryCacheParams(

ttl = 12.hours,

maxKeys = 262143, // 200MB

cacheName = getCacheName(FavTfgTopic, Model20m145k2020)),

(LogFavBasedKgoApeTopic, Model20m145k2020) -> EnabledInMemoryCacheParams(

ttl = 6.hours,

maxKeys = 262143,

cacheName = getCacheName(LogFavBasedKgoApeTopic, Model20m145k2020)),

)

new ClientConfig(inMemCacheParamsOverrides = cacheParamsMap)

}

}