package com.twitter.graph\_feature\_service.worker.modules

import com.google.inject.Provides

import com.twitter.concurrent.AsyncSemaphore

import com.twitter.finagle.stats.StatsReceiver

import com.twitter.graph\_feature\_service.common.Configs.\_

import com.twitter.graph\_feature\_service.worker.util

import com.twitter.graph\_feature\_service.worker.util.AutoUpdatingGraph

import com.twitter.graph\_feature\_service.worker.util.FollowedByPartialValueGraph

import com.twitter.graph\_feature\_service.worker.util.FollowingPartialValueGraph

import com.twitter.graph\_feature\_service.worker.util.GraphContainer

import com.twitter.graph\_feature\_service.worker.util.GraphKey

import com.twitter.graph\_feature\_service.worker.util.MutualFollowPartialValueGraph

import com.twitter.inject.TwitterModule

import com.twitter.inject.annotations.Flag

import com.twitter.util.Timer

import javax.inject.Singleton

object GraphContainerProviderModule extends TwitterModule {

@Provides

@Singleton

def provideAutoUpdatingGraphs(

@Flag(WorkerFlagNames.HdfsCluster) hdfsCluster: String,

@Flag(WorkerFlagNames.HdfsClusterUrl) hdfsClusterUrl: String,

@Flag(WorkerFlagNames.ShardId) shardId: Int

)(

implicit statsReceiver: StatsReceiver,

timer: Timer

): GraphContainer = {

// NOTE that we do not load some the graphs for saving RAM at this moment.

val enabledGraphPaths: Map[GraphKey, String] =

Map(

FollowingPartialValueGraph -> FollowOutValPath,

FollowedByPartialValueGraph -> FollowInValPath

)

// Only allow one graph to update at the same time.

val sharedSemaphore = new AsyncSemaphore(1)

val graphs: Map[GraphKey, AutoUpdatingGraph] =

enabledGraphPaths.map {

case (graphKey, path) =>

graphKey -> AutoUpdatingGraph(

dataPath = getHdfsPath(path),

hdfsCluster = hdfsCluster,

hdfsClusterUrl = hdfsClusterUrl,

shard = shardId,

minimumSizeForCompleteGraph = 1e6.toLong,

sharedSemaphore = Some(sharedSemaphore)

)(

statsReceiver

.scope("graphs")

.scope(graphKey.getClass.getSimpleName),

timer

)

}

util.GraphContainer(graphs)

}

}