package com.twitter.search.earlybird.partition;

import java.io.IOException;

import org.slf4j.Logger;

import org.slf4j.LoggerFactory;

import com.twitter.search.earlybird.exception.CriticalExceptionHandler;

public class SegmentWarmer {

private static final Logger LOG = LoggerFactory.getLogger(SegmentWarmer.class);

private final CriticalExceptionHandler criticalExceptionHandler;

public SegmentWarmer(CriticalExceptionHandler criticalExceptionHandler) {

this.criticalExceptionHandler = criticalExceptionHandler;

}

private boolean shouldWarmSegment(SegmentInfo segmentInfo) {

return segmentInfo.isEnabled()

&& segmentInfo.isComplete()

&& segmentInfo.isOptimized()

&& !segmentInfo.isIndexing();

}

/\*\*

\* Warms a segment if it is ready to be warmed. Only has an affect on Archive Lucene segments.

\*/

public boolean warmSegmentIfNecessary(SegmentInfo segmentInfo) {

if (!shouldWarmSegment(segmentInfo)) {

return false;

}

try {

segmentInfo.getIndexSegment().warmSegment();

return true;

} catch (IOException e) {

// This is a bad situation, as earlybird can't search a segment that hasn't been warmed up

// So we delete the bad segment, and restart the earlybird if it's in starting phrase,

// otherwise alert.

LOG.error("Failed to warmup segment " + segmentInfo.getSegmentName()

+ ". Will destroy local unreadable segment.", e);

segmentInfo.deleteLocalIndexedSegmentDirectoryImmediately();

criticalExceptionHandler.handle(this, e);

return false;

}

}

}