package com.twitter.search.earlybird.tools;

import java.io.BufferedReader;

import java.io.IOException;

import java.nio.charset.Charset;

import java.nio.file.FileSystems;

import java.nio.file.Files;

import java.nio.file.Path;

import com.google.common.base.Preconditions;

import org.apache.commons.codec.binary.Base64;

import org.apache.thrift.TDeserializer;

import org.apache.thrift.TException;

import com.twitter.search.earlybird.thrift.EarlybirdRequest;

/\*\*

\*

\* This tool deserializes the collected thrift requests into human readable format.

\*

\* Takes zero or one parameter: path to the thrift request log file.

\*

\* To run: Launch main from IntelliJ / Eclipse.

\*/

public final class EarlybirdThriftRequestDeserializerUtil {

private static final String DEFAULT\_LOG\_FILE\_LOCATION = "/tmp/eb\_req.B64";

// Not threadsafe. Single thread main().

private static final Base64 B64 = new Base64(0);

private static final TDeserializer DESERIALIZER = new TDeserializer();

private EarlybirdThriftRequestDeserializerUtil() {

}

/\*\*

\* Runs the EarlybirdThriftRequestDeserializerUtil tool with the given command-line arguments.

\*/

public static void main(String[] args) throws IOException {

Path logFile = null;

if (args.length == 1) {

logFile = FileSystems.getDefault().getPath(args[0]);

} else if (args.length == 0) {

logFile = FileSystems.getDefault().getPath(DEFAULT\_LOG\_FILE\_LOCATION);

} else {

System.err.println("Usage: takes zero or one parameter (log file path). "

+ "If no log file is specified, " + DEFAULT\_LOG\_FILE\_LOCATION + " is used.");

//CHECKSTYLE:OFF RegexpSinglelineJava

System.exit(-1);

//CHECKSTYLE:ON RegexpSinglelineJava

}

Preconditions.checkState(logFile.toFile().exists());

BufferedReader reader = Files.newBufferedReader(logFile, Charset.defaultCharset());

try {

String line;

while ((line = reader.readLine()) != null) {

EarlybirdRequest ebRequest = deserializeEBRequest(line);

if (ebRequest != null) {

System.out.println(ebRequest);

}

}

} finally {

reader.close();

}

}

private static EarlybirdRequest deserializeEBRequest(String line) {

EarlybirdRequest ebRequest = new EarlybirdRequest();

byte[] bytes = B64.decode(line);

try {

DESERIALIZER.deserialize(ebRequest, bytes);

} catch (TException e) {

System.err.println("Error deserializing thrift.");

}

return ebRequest;

}

}