



Troubleshooting NoClassDefFoundError in Spark PI Job



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Issue

When running a Spark PI job, users may encounter errors related to missing class definitions, such as `java.lang.NoClassDefFoundError`. This KB article addresses a specific instance of such an error and provides steps to resolve it.

The customer encountered the following error while attempting to execute a Spark PI job:

```
ERROR StatusConsoleListener Could not create plugin of type  
class org.apache.logging.log4j.core.async.AsyncLoggerConfig for element  
AsyncLogger: java.lang.NoClassDefFoundError: com/lmax/disruptor/EventHandler
```

Environment

Apache Spark

Cause

Identify Missing Dependency:

The error suggests a missing class definition related to `com.lmax.disruptor.EventHandler`. This indicates a missing dependency required by Spark.

Locate Spark Jars Directory:

Spark typically loads its jar files from the Spark Home directory. This directory is commonly found at `/opt/mapr/spark/spark-<version>/jars`.

Search for Required Jar:

The error specifically mentions the missing class from the `disruptor-<version>.jar`. Check whether the `disruptor-<version>.jar` exists in the Spark jars directory.

Verify Jar Presence:

If the `disruptor-<version>.jar` is not found in the Spark jars directory, it needs to be added.

Resolution

Move Jar to Correct Location:

Move the `disruptor-<version>.jar` to the `SPARK_HOME` directory to ensure it is accessible to Spark during job execution.

Re-run Spark PI Job:

Once Spark is restarted and the `disruptor` jar is in place, re-run the Spark PI job to confirm resolution.

Verify Error Absence:

Upon successful execution of the job, verify that the `NoClassDefFoundError` no longer occurs.

