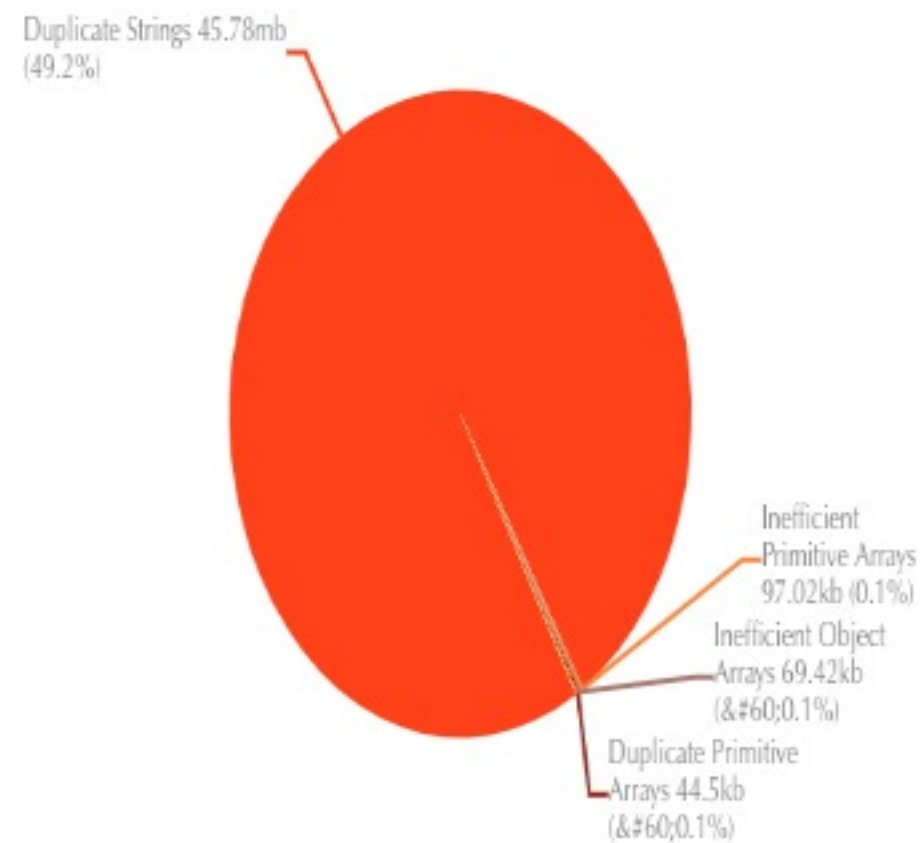


# 1. Heap Statistics

Learn more about [Heap Statistics](#)

Memory wasted: 46.04mb (49%)



Total Size



93.14mb

Object Count



4,029,008

Class Count



1,839

Thread Count






4

## 2. What's in your Memory (by class)?






Learn more about [What's in Memory](#)

Class	Percentage	Size	Count
String 	49.7%	46.31mb	2,006,968

<code>scala.collection.immutable.\$colon\$colon</code> 	<div><div>49.1%</div></div>	45.78mb	2,000,000
<code>int[]</code> 	<div><div>0.3%</div></div>	270.3kb	650
<code>byte[]</code> 	<div><div>0.2%</div></div>	205.79kb	500

### 3. Large objects

Learn more about [Large Objects](#)

Name	Percentage	Size
 <code>.Java.Static.ray.dedup.App\$.str</code>  <i>&lt;&lt;Object might be causing memory leak&gt;&gt;</i>	<div><div>98.3%</div></div>	91.6mb
<code>Unreachable (garbage) objects</code> 	<div><div>0.4%</div></div>	343.88kb
<code>.Java.Static.sun.launcher.LauncherHelper.scloder</code> 	<div><div>0.2%</div></div>	183.23kb
<code>.Java.Static.sun.util.calendar.ZoneInfoFile.ruleArray</code> 	<div><div>0.1%</div></div>	99.53kb
.. and 2632 more objects retaining 885.61kb (0.9%)		

### 4. Object Headers

## 4. Object Headers

Learn more about [Object Headers](#)



### Top Object Headers

Class	Percentage	Total header size	Avg obj size	Count
String	<div><div>24.7%</div></div>	22.97mb	24	2,006,968
scala.collection.immutable.\$colon\$colon	<div><div>24.6%</div></div>	22.89mb	24	2,000,000


### How to fix excessive Object headers?

Please refer to our [recommendations](#).

## 5. Duplicate Strings


Learn more about [Duplicate Strings](#)

Total Strings




2,006,968

Unique Strings



6,621

Wasted Memory



45.78mb (49.2%)

💡 Top Duplicate Strings

Duplicate String	Percentage	Wasted	Count
"Hello World-970"	<0.1%	46.85kb	2,000
"Hello World-8"	<0.1%	46.85kb	2,000
"Hello World-621"	<0.1%	46.85kb	2,000
"Hello World-846"	<0.1%	46.85kb	2,000
"Hello World-85"	<0.1%	46.85kb	2,000

[Show all records >>](#)

❓ Who is holding Duplicate Strings?




Object Tree	Percentage	size
<code>scala.collection.immutable.\$colon\$colon.head</code> 	49.1%	46,851K
<code>{j.u.HashSet}</code> 	<0.1%	4K

## 6. Inefficient collections

Learn more about [Inefficient Collections](#)

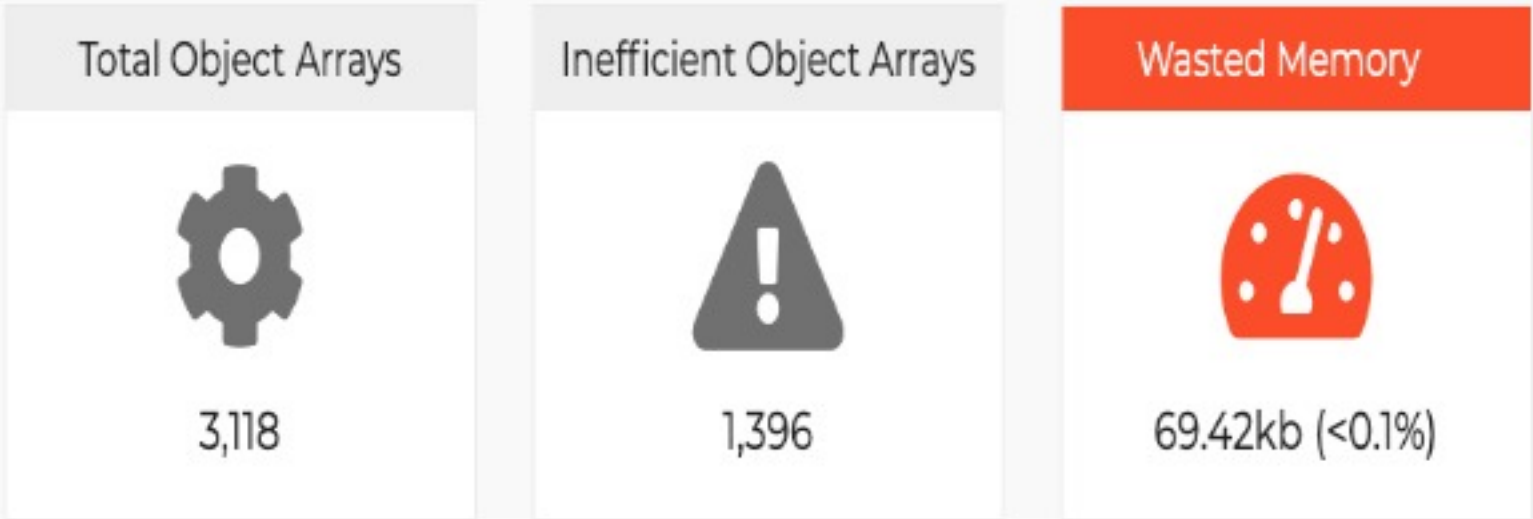


### Who is holding Inefficient Collections?

Object Tree	Percentage	size
<a href="#">java.util.jar.Attributes.map</a> 	<0.1%	3K
<a href="#">(ju.HashMap).values</a> 	<0.1%	2K
<a href="#">ch.qos.logback.core.joran.spi.ElementSelector.particleList</a> 	<0.1%	2K


## 7. Inefficient Object Arrays

Learn more about [Inefficient Object Arrays](#)



 Who is holding Inefficient Object Arrays?

Object Tree	Percentage	size
<a href="#">static.scala.math.BigInt\$.cache</a> 	<0.1% <div></div>	8K
<a href="#">java.lang.invoke.MethodTypeForm.lambdaForms</a> 	<0.1% <div></div>	4K
<a href="#">sun.nio.cs.StandardCharsets\$Aliases.ht</a> 	<0.1% <div></div>	3K

 How to fix Inefficient Object Arrays?






## 8. Inefficient Primitive Arrays

Learn more about [Inefficient Primitive Arrays](#)



 Who is holding Inefficient Primitive Arrays?

Object Tree	Percentage	size
<a href="#">java.io.BufferedWriter.cb</a> 	<0.1%	32K
<a href="#">java.nio.HeapByteBuffer.hb</a> 	<0.1%	16K
<a href="#">com.sun.xml.internal.stream.util.BufferAllocator.largeCharBuffer</a> 	<0.1%	13K

 How to fix Inefficient Primitive Arrays?

## 9. Boxed Numbers

Learn more about [Boxed Numbers](#)

Not Detected

## 10. Duplicate Objects

Learn more about [Duplicate Objects](#)

Not Detected

## 11. Duplicate Primitive Arrays

Learn more about [Duplicate Primitive Arrays](#)

Total Duplicate Arrays



556

Wasted Memory



44.51 kb (-0.3%)



556

44.5kb (&lt;0.1%)

## Types of Duplicate Arrays

Array Type	Percentage	Wasted	Duplicate Count
byte[]	<0.1%	17.16kb	43
char[]	<0.1%	16.95kb	12
int[]	<0.1%	9.48kb	484
short[]	<0.1%	576b	8
boolean[]	<0.1%	320b	6

[Show all records >>](#)

## Top Duplicate Arrays

Duplicate Array	Percentage	Wasted	Count
byte[8192](0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, ...)	<0.1%	16.03kb	3
char[8192](, ....., ...)	<0.1%	16.02kb	2
int[0]()	<0.1%	6.41kb	411
short[32](0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, ...)	<0.1%	560b	8
int[32](0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, ...)	<0.1%	432b	4

[Show all records >>](#)

## ? Who is holding Duplicate Arrays?

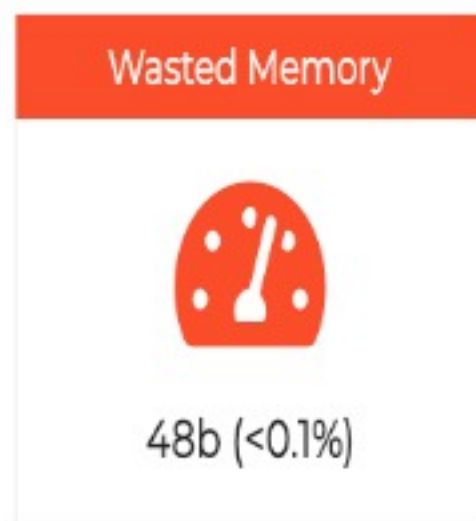
Object Tree	Percentage	size
<a href="#">java.io.BufferedWriter.cb</a>	<0.1%	16K
<a href="#">java.nio.HeapByteBuffer.hb</a>	<0.1%	10K
<a href="#">java.io.BufferedInputStream.buf</a>	<0.1%	5K

## 🔧 How to fix Duplicate Arrays?

Please refer to our [recommendations](#).

## 12. Objects waiting for Finalization

Learn more about [Objects waiting for Finalization](#)



## ? What are the objects waiting for finalization?

To see objects waiting for finalization, [click here](#)

## How to fix objects waiting for finalization?

Please refer to our [recommendations](#).

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## 13. Threads

Learn more about [Threads](#)



To view all threads stacktrace [click here](#) 

## 14. Heap settings

Learn more about [Heap Settings](#)

No major recommendations.

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## 15. System Properties

Learn more about [System Properties](#)

Key	Value
awt.toolkit	sun.awt.X11Toolkit
file.encoding	UTF-8
file.encoding.pkg	sun.io
file.separator	/
java.awt.graphicsenv	sun.awt.X11GraphicsEnvironment

[Show all records >>](#)