```
Source
                                                                                                                         Dattern
     LeafQueue leafQueue = ...;
                                                       LeafQueue leafQueue = ...;
    -synchronized (leafOueue) {
                                                                                                         synchronized (obi)
                                                                                                                               lock.lock();
                                                      + leafQueue.getReadLock().lock();
1
       57 LOC
                                                         57 LOC
                                                                                                                              } finally {
                                                      +} finally {
                                                                                                                               lock.unlock();
                                                         leafQueue.getReadLock().unlock();
    -Lock readlock =
                                                      +synchronized (classLoaderContainerMapLock) {

    classLoaderContainerMapLock.readLock();

    -trv {
    readlock.lock();
                                                                                                         try {
    - result = classLoaderContainerMap.get(tccl);
                                                                                                          readLock.lock();
    -} finally {
                                                                                                          read operations
      readlock.unlock();
                                                                                                         } finally {
    -if (result == null) {
                                                                                                         readLock.unlock();
    - Lock writelock =
                                                                                                                              synchronized {
       classLoaderContainerMapLock.writeLock();
                                                                                                         try {
                                                                                                                               all operations
    - try {
                                                                                                          writeLock.lock();
        writeLock.lock();
                                                                                                          write operations
        result = classLoaderContainerMap.get(tccl);
                                                         result = classLoaderContainerMap.get(tccl);
                                                                                                         } finally {
        if (result == null) {
                                                         if (result == null) {
          result = new ServerContainerImpl();
                                                           result = new ServerContainerImpl();
                                                                                                         writeLock.unlock();
           classLoaderContainerMap.put(tccl,result);
                                                           classLoaderContainerMap.put(tccl,result);
       } finally {
        writeLock.unlock();
     private static final Object lock = new
                                                       private static final Object lock = new
       Object();
                                                         Object();
     private Map<...> count = new HashMap<>();
                                                       private Map<...> count = new HashMap<>();
    -synchronized (count) {
                                                      +synchronized(lock)
                                                         if (!jobCounts.containsKev(jobID)) {
    Pair<Job, String> kev =
                                                           jobCounts.put(jobID, new HashMap<>());
        new ImmutablePair<>(jobID, name);
                                                                                                         synchronized (obj1)
                                                                                                                             synchronized (obj2)
                                                         Map<String, Integer> count =
                                                           jobCounts.get(jobID);
    - if (count.containsKey(key)) {
                                                         if (count.containsKey(name)) {
        count.put(key, count.get(key) + 1);
                                                           count.put(name, count.get(name) + 1);
       } else {
                                                         } else {
        count.put(key, 1);
                                                           count.put(name, 1);
    -public synchronized void reset() {
                                                      +private final Object membersLock = new
                                                                                                                              void foo() {
                                                       + Object();
                                                      +public void reset() {
                                                                                                         synchronized void
                                                                                                                               synchronized
                                                      + synchronized (membersLock) {
                                                                                                                              (obj) {
                                                                                                         foo() {
4
       map.clear();
                                                           map.clear();
       members = EMPTY MEMBERS;
                                                           members = EMPTY MEMBERS;
    -public boolean isAccessed() {
                                                      +public synchronized boolean isAccessed() {
                                                                                                                              synchronized void
                                                                                                         void foo() {
       return this.accessed;
                                                         return this.accessed;
                                                                                                                              foo() {
                                                                                                          . . .
                                                                                                                                . . .
    -synchronized (this.channelLookup) {
         lookupResponse = AkkaUtils.
                                                      lookupResponse = AkkaUtils.
    <JobManagerMessages.ConnectionInformation>ask(c
                                                      <JobManagerMessages.ConnectionInformation>ask(c
    hannelLookup, new
                                                      hannelLookup, new
                                                                                                         synchronized (obj)
                                                      JobManagerMessages.LookupConnectionInformation(
    JobManagerMessages.LookupConnectionInformation(
    connectionInfo, jobID, sourceChannelID),
                                                      connectionInfo, jobID, sourceChannelID),
    timeout).response();
                                                      timeout).response();
      }catch(IOException ioe) {
        throw ioe;
    -}
```