

1. abstraction:ApplicationId
 2. crash point:before read
 3. bug type:data race
-
1. timing:crash

```
1  /*system version:hadoop-2.8.0
2  *
   org.apache.hadoop.yarn.server.resourcemanager.scheduler.capaci
   ty.CapacityScheduler.allocateContainersToNode#1227
3  * need calling contex, 2 callers
4  */
5  /*
6  *protected ConcurrentMap<ApplicationId,
   SchedulerApplication<T>> applications;
7  */
8  public T getApplicationAttempt(ApplicationAttemptId
   applicationAttemptId) {
9      SchedulerApplication<T> app = applications.get(
10         applicationAttemptId.getApplicationId());//crash here
11     return app == null ? null : app.getCurrentAppAttempt();
12 }
```