

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

```
1  /*system version:hadoop3.2.0
2  *
   org.apache.hadoop.yarn.server.resourcemanager.scheduler.Schedu
   lerApplicationAttempt.incNumAllocatedContainers#1244
3  * need contex, 15 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());
11      return app == null ? null : app.getCurrentAppAttempt();
```