

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

```
1  /*system version:hadoop-0.23.0
2  *
   org.apache.hadoop.yarn.server.resourcemanager.amlauncher.AMLau
   ncher.launch#107
3  * need calling contex, four caller
4  */
5  private void launch() throws IOException {
6      ContainerId masterContainerID =
application.getMasterContainer().getId();//crash point
7      ApplicationSubmissionContext applicationContext =
8          application.getSubmissionContext();
9      LOG.info("Setting up container " +
application.getMasterContainer()
10         + " for AM " + application.getAppAttemptId());
11      ContainerLaunchContext launchContext =
12          createAMContainerLaunchContext(applicationContext,
masterContainerID);
13      StartContainerRequest request =
14
15      recordFactory.newRecordInstance(StartContainerRequest.class);
16      request.setContainerLaunchContext(launchContext);
17      containerMgrProxy.startContainer(request);
18      LOG.info("Done launching container " +
application.getMasterContainer()
19         + " for AM " + application.getAppAttemptId());
20  }
```