- 1. abstraction:HServerAddress(node)
- 2. crash point:before read
- 3. bug type:data race
- 4. timing:crash

```
/* system-version:hbase-0.90.2
  * crash
  point:org.apache.hadoop.hbase.catalog.CatalogTracker#getMetaServer
  Connection#268
  * need calling contex: three caller, only one cause
  bugs(waitForMeta)

4 */
  //metaLocation is field and its type reference is
  HServerAddress
  HRegionInterface current = getCachedConnection(metaLocation);
```