# HBASE-25274

zhou 0145

2020-11-11

# Contents

# Chapter 1

# Root issue HBASE-25274

### 1.1 Summary

Regionserver crash by YouAreDeadException

### 1.2 Description

Hbase cluster is enabled kerberos;

This problem occurs during cluster running, not during startup. So the Kerberos configuration should be fine

hmaster log:

2020-10-31 08:27:02,594 INFO org.apache.hadoop.hbase.master.assignment. RegionTransitionProcedure: Dispatch pid=32630, ppid=32629, state=RUNNABLE: REGION\_TRANSITION\_DISPATCH, locked=true; UnassignProcedure table=dm\_sn\_sa: t\_agent\_relation\_info, region=66e7cf0d6ad81f90b5aeca2c74f26af6, server=cc1 ,16020,15988329396742020-10-31 08:27:02,594 INFO org.apache.hadoop.hbase. master.assignment.RegionTransitionProcedure: Dispatch pid=32630, ppid=32629, state= RUNNABLE:REGION\_TRANSITION\_DISPATCH, locked=true; UnassignProcedure table=dm\_sn\_sa: t\_agent\_relation\_info, region=66e7cf0d6ad81f90b5aeca2c74f26af6, server=cc1 ,16020,15988329396742020-10-31 08:27:02,712 WARN org.apache.hadoop.hbase.master. procedure.RSProcedureDispatcher: Failed dispatch to server=cc1,16020,15988329396 74 try=0javax.security.sasl.SaslException: Call to cc1/192.168.68.94:16020 failed on local exception: javax.security.sasl.SaslException: GSS initiate failed [Caused by GSSException: No valid credentials provided (Mechanism level: Failed to find any Kerberos tgt)] [Caused by javax.security.sasl.SaslException: GSS initiate failed [ Caused by GSSException: No valid credentials provided (Mechanism leve 1: Failed to find any Kerberos tgt)]] at sun.reflect.NativeConstructorAccessorImpl. newInstance0(Native Method) at sun.reflect.NativeConstructorAccessorImpl.newInstance (NativeConstructorAccessorImpl.java:62) at sun.reflect. DelegatingConstructorAccessorImpl.newInstance(DelegatingConstructorAccessorImpl.java :45) at java.lang.reflect.Constructor.newInstance(Constructor.java:423) at org. apache.hadoop.h base.ipc.IPCUtil.wrapException(IPCUtil.java:221) at org.apache.hadoop.hbase.ipc. AbstractRpcClient.onCallFinished(AbstractRpcClient.java:390) at org.apache.hadoop. hbase.ipc.AbstractRpcClient.access\$100(AbstractRpcClient.java:95) at org.apache. hadoop.hbase.ipc.AbstractRpcClient\$3.run(AbstractRpcClient.java:410) at org.apache. hadoop.hbase.ipc.AbstractRpcClient\$3.run(AbstractRpcClient.java:406) at org .apache.hadoop.hbase.ipc.Call.callComplete(Call.java:103) at org.apache.hadoop.hbase.ipc .Call.setException(Call.java:118) at org.apache.hadoop.hbase.ipc. BufferCallBeforeInitHandler.userEventTriggered(BufferCallBeforeInitHandler.java:92) at org.apache.hbase.thirdparty.io.netty.channel.AbstractChannelHandlerContext.

```
thirdparty.io.netty.channel.AbstractChannelHandlerContext.invokeUserEventTriggered(
       AbstractChannelHandlerContext.java:312) at org.apache.hbase.thirdparty.io.netty.
       channel.AbstractChannelHandlerContext.fireUserEventTriggered(
       AbstractChannelHandlerContext.java:304) at org.apache.hbase.thirdparty.io.netty.
       channel.ChannelInboundHandlerAdapter.userEventTriggered(ChannelInboundHandlerAdapter
       .iava:108) a
   t org.apache.hbase.thirdparty.io.netty.channel.AbstractChannelHandlerContext.
       invokeUserEventTriggered(AbstractChannelHandlerContext.java:326) at org.apache.hbase
       .thirdparty.io.netty.channel.AbstractChannelHandlerContext.invokeUserEventTriggered(
       AbstractChannelHandlerContext.java:312) at org.apache.hbase.thirdparty.io.netty.
       channel.AbstractChannelHandlerContext.fireUserEventTriggered(AbstractChanne
   lHandlerContext.java:304) at org.apache.hbase.thirdparty.io.netty.channel.
       ChannelInboundHandlerAdapter.userEventTriggered(ChannelInboundHandlerAdapter.java
       :108) at org.apache.hbase.thirdparty.io.netty.handler.codec.ByteToMessageDecoder.
       {\tt userEventTriggered} \ ({\tt ByteToMessageDecoder.java:} 366) \ \ {\tt at org.apache.hbase.thirdparty.io.}
       netty.channel.AbstractChannelHandlerContext.invokeUserEventTriggered(AbstractCha
   nnelHandlerContext.java:326) at org.apache.hbase.thirdparty.io.netty.channel.
       AbstractChannelHandlerContext.invokeUserEventTriggered (AbstractChannelHandlerContext
       .java:312) at org.apache.hbase.thirdparty.io.netty.channel.
       AbstractChannelHandlerContext.fireUserEventTriggered(AbstractChannelHandlerContext.
       java:304) at org.apache.hbase.thirdparty.io.netty.channel.DefaultChannelPipeline$
       HeadContext.user
   EventTriggered(DefaultChannelPipeline.java:1426) at org.apache.hbase.thirdparty.io.netty
       .channel.AbstractChannelHandlerContext.invokeUserEventTriggered(
       AbstractChannelHandlerContext.java:326) at org.apache.hbase.thirdparty.io.netty.
       channel.AbstractChannelHandlerContext.invokeUserEventTriggered(
       AbstractChannelHandlerContext.java:312) at org.apache.hbase.thirdparty.io.netty.
       channel.DefaultChannelPip
   eline.fireUserEventTriggered(DefaultChannelPipeline.java:924) at org.apache.hadoop.hbase
       .ipc.NettyRpcConnection.failInit(NettyRpcConnection.java:179) at org.apache.hadoop.
       hbase.ipc.NettyRpcConnection.access$500(NettyRpcConnection.java:71) at org.apache.
       hadoop.hbase.ipc.NettyRpcConnection$2.operationComplete(NettyRpcConnection.java:247)
        at org.apache.hbase.thirdparty.io.netty.util.concurrent.Defaul
   tPromise.notifyListener0(DefaultPromise.java:502) at org.apache.hbase.thirdparty.io.
       netty.util.concurrent.DefaultPromise.notifyListenersNow(DefaultPromise.java:476) at
       org.apache.hbase.thirdparty.io.netty.util.concurrent.DefaultPromise.notifyListeners(
       DefaultPromise.java:415) at org.apache.hbase.thirdparty.io.netty.util.concurrent.
       DefaultPromise.addListener(DefaultPromise.java:152) at org.apache.h
   \verb| adoop.hb| ase.ipc.NettyRpcConnection.saslNegotiate(NettyRpcConnection.java:201)| at org. \\
       apache.hadoop.hbase.ipc.NettyRpcConnection.access$800(NettyRpcConnection.java:71) at
        org.apache.hadoop.hbase.ipc.NettyRpcConnection$3.operationComplete(
       NettyRpcConnection.java:273) at org.apache.hadoop.hbase.ipc.NettyRpcConnection$3.
       operationComplete(NettyRpcConnection.java:261) at org.apache.hbase.thirdparty.io.n
15
   etty.util.concurrent.DefaultPromise.notifyListener0(DefaultPromise.java:502) at org.
       apache.hbase.thirdparty.io.netty.util.concurrent.DefaultPromise.notifyListeners0(
       DefaultPromise.java:495) at org.apache.hbase.thirdparty.io.netty.util.concurrent.
       DefaultPromise.notifyListenersNow(DefaultPromise.java:474) at orq.apache.hbase.
       thirdparty.io.netty.util.concurrent.DefaultPromise.notifyListeners(DefaultP
   romise.java:415) at org.apache.hbase.thirdparty.io.netty.util.concurrent.DefaultPromise.
16
       setValue0(DefaultPromise.java:540) at org.apache.hbase.thirdparty.io.netty.util.
       concurrent.DefaultPromise.setSuccess0(DefaultPromise.java:529) at org.apache.hbase.
       thirdparty.io.netty.util.concurrent.DefaultPromise.trySuccess(DefaultPromise.java
       :101) at org.apache.hbase.thirdparty.io.netty.channel.DefaultChannel
   Promise.trySuccess(DefaultChannelPromise.java:84) at org.apache.hbase.thirdparty.io.
17
       netty.channel.epoll.AbstractEpollChannel$AbstractEpollUnsafe.fulfillConnectPromise(
       AbstractEpollChannel.java:610) at org.apache.hbase.thirdparty.io.netty.channel.epoll
       .AbstractEpollChannel$AbstractEpollUnsafe.finishConnect(AbstractEpollChannel.java
       :648) at org.apache.hbase.thirdparty.io.netty.channel.epoll.Abstract
   EpollChannel$AbstractEpollUnsafe.epollOutReady(AbstractEpollChannel.java:524) at org.
18
       apache.hbase.thirdparty.io.netty.channel.epoll.EpollEventLoop.processReady(
       EpollEventLoop.java:417) at org.apache.hbase.thirdparty.io.netty.channel.epoll.
       EpollEventLoop.run(EpollEventLoop.java:328) at org.apache.hbase.thirdparty.io.netty.
       util.concurrent.SingleThreadEventExecutor$5.run(SingleThreadEventExecutor.jav
   a:905) at org.apache.hbase.thirdparty.io.netty.util.concurrent.FastThreadLocalRunnable.
       run (FastThreadLocalRunnable.java:30) at java.lang.Thread.run (Thread.java:748) Caused
```

invokeUserEventTriggered(AbstractChannelHandlerContext.java:326) at org.apache.hbase

```
by: javax.security.sasl.SaslException: GSS initiate failed [Caused by GSSException:
       No valid credentials provided (Mechanism level: Failed to find any Kerberos tgt)] at
        com.sun.security.sasl.gsskerb.GssKrb5Client.evaluateChalleng
   e(GssKrb5Client.java:211) at org.apache.hadoop.hbase.security.AbstractHBaseSaslRpcClient
       .getInitialResponse(AbstractHBaseSaslRpcClient.java:131) at org.apache.hadoop.hbase.
       security.NettyHBaseSaslRpcClientHandler$1.run(NettyHBaseSaslRpcClientHandler.java
       :109) at org.apache.hadoop.hbase.security.NettyHBaseSaslRpcClientHandler$1.run(
       NettyHBaseSaslRpcClientHandler.java:105) at java.security.AccessCont
   roller.doPrivileged(Native Method) at javax.security.auth.Subject.doAs(Subject.java:422)
        at org.apache.hadoop.security.UserGroupInformation.doAs(UserGroupInformation.java
       :1875) at org.apache.hadoop.hbase.security.NettyHBaseSaslRpcClientHandler.
       handlerAdded(NettyHBaseSaslRpcClientHandler.java:105) at org.apache.hbase.thirdparty
       .io.netty.channel.AbstractChannelHandlerContext.callHandlerAdded(Abstrac
   tChannelHandlerContext.java:953) at org.apache.hbase.thirdparty.io.netty.channel.
       DefaultChannelPipeline.callHandlerAdded0(DefaultChannelPipeline.java:610) at org.
       apache.hbase.thirdparty.io.netty.channel.DefaultChannelPipeline.addFirst(
       DefaultChannelPipeline.java:181) at org.apache.hbase.thirdparty.io.netty.channel.
       DefaultChannelPipeline.addFirst(DefaultChannelPipeline.java:360) at org.apache.hbase
   .thirdparty.io.netty.channel.DefaultChannelPipeline.addFirst(DefaultChannelPipeline.java
       :339) at org.apache.hadoop.hbase.ipc.NettyRpcConnection.saslNegotiate(
       NettyRpcConnection.java:200) ... 19 moreCaused by: GSSException: No valid
       credentials provided (Mechanism level: Failed to find any Kerberos tgt) at sun.
       security.jgss.krb5.Krb5InitCredential.getInstance(Krb5InitCredential.java:147) at
   urity.jqss.krb5.Krb5MechFactory.getCredentialElement(Krb5MechFactory.java:122) at sun.
24
       security.jgss.krb5.Krb5MechFactory.getMechanismContext(Krb5MechFactory.java:187) at
       sun.security.jgss.GSSManagerImpl.getMechanismContext(GSSManagerImpl.java:224) at sun
       .security.jgss.GSSContextImpl.initSecContext(GSSContextImpl.java:212) at sun.
       security.jqss.GSSContextImpl.initSecContext(GSSContextImpl.java:179)
   at com.sun.security.sasl.gsskerb.GssKrb5Client.evaluateChallenge(GssKrb5Client.java:192)
         ... 32 moreÂă
```

#### regionserver log:

```
2020-10-31 08:27:05,135 ERROR org.apache.hadoop.hbase.regionserver.HRegionServer: *****
    ABORTING region server cc1,16020,1598832939674: org.apache.hadoop.hbase.
    YouAreDeadException: Server REPORT rejected; currently processing cc1
    ,16020,1598832939674 as dead server2020-10-31 08:27:05,135 ERROR org.apache.hadoop.
    hbase.regionserver.HRegionServer: **** ABORTING regio
n server cc1,16020,1598832939674: org.apache.hadoop.hbase.YouAreDeadException: Server
    REPORT rejected; currently processing cc1,16020,1598832939674 as dead server at org.
    apache.hadoop.hbase.master.ServerManager.checkIsDead(ServerManager.java:366) at org.
    apache.hadoop.hbase.master.ServerManager.regionServerReport(ServerManager.java:253)
    at org.apache.hadoop.hbase.master.MasterRpcServices.regionServ
erReport (MasterRpcServices.java:490) at org.apache.hadoop.hbase.shaded.protobuf.
    generated.RegionServerStatusProtos$RegionServerStatusService$2.callBlockingMethod(
    RegionServerStatusProtos.java:13139) at org.apache.hadoop.hbase.ipc.RpcServer.call(
    RpcServer.java:413) at org.apache.hadoop.hbase.ipc.CallRunner.run(CallRunner.java
    :130) at org.apache.hadoop.hbase.ipc.RpcExecutor$Handler.run(RpcExecutor.j
ava:324) at org.apache.hadoop.hbase.ipc.RpcExecutor$Handler.run(RpcExecutor.java:304)Âă
    *****org.apache.hadoop.hbase.YouAreDeadException: org.apache.hadoop.hbase.
    YouAreDeadException: Server REPORT rejected; currently processing cc1
    ,16020,1598832939674 as dead server at org.apache.hadoop.hbase.master.ServerManager.
    checkIsDead(ServerManager.java:366) at org.apache.hadoop.hbase.master.ServerManager.
ionServerReport(ServerManager.java:253) at org.apache.hadoop.hbase.master.
    MasterRpcServices.regionServerReport (MasterRpcServices.java:490) at org.apache.
    hadoop.hbase.shaded.protobuf.generated.RegionServerStatusProtos$
    RegionServerStatusService$2.callBlockingMethod(RegionServerStatusProtos.java:13139)
    at org.apache.hadoop.hbase.ipc.RpcServer.call(RpcServer.java:413) at org.apache.
```

```
llRunner.run(CallRunner.java:130) at org.apache.hadoop.hbase.ipc.RpcExecutor$Handler.run
          (RpcExecutor.java:324) at org.apache.hadoop.hbase.ipc.RpcExecutor$Handler.run(
          RpcExecutor.java:304)
      at sun.reflect.NativeConstructorAccessorImpl.newInstanceO(Native Method) at sun.reflect
7
            .NativeConstructorAccessorImpl.newInstance(NativeConstructorAccessorImpl.java:62)
            at sun.reflect.DelegatingConstructorAccess
    orImpl.newInstance(DelegatingConstructorAccessorImpl.java:45) at java.lang.reflect.
          Constructor.newInstance(Constructor.java:423) at org.apache.hadoop.hbase.ipc.
          RemoteWithExtrasException.instantiateException(RemoteWithExtrasException.java:99) at
           org.apache.hadoop.hbase.ipc.RemoteWithExtrasException.unwrapRemoteException(
          RemoteWithExtrasException.java:89) at org.apache.hadoop.hbase.shaded.protobuf.P
    rotobufUtil.makeIOExceptionOfException(ProtobufUtil.java:361) at org.apache.hadoop.hbase
          .shaded.protobuf.ProtobufUtil.getRemoteException(ProtobufUtil.java:338) at org.
          apache.hadoop.hbase.regionserver.HRegionServer.tryRegionServerReport(HRegionServer.
          java:1227) at org.apache.hadoop.hbase.regionserver.HRegionServer.run(HRegionServer.
          java:1024) at java.lang.Thread.run(Thread.java:748)Caused by: org.a
    pache.hadoop.hbase.ipc.RemoteWithExtrasException(org.apache.hadoop.hbase.
          YouAreDeadException): org.apache.hadoop.hbase.YouAreDeadException: Server REPORT
          rejected; currently processing cc1,16020,1598832939674 as dead server at org.apache.
          hadoop.hbase.master.ServerManager.checkIsDead(ServerManager.java:366) at org.apache.
          hadoop.hbase.master.ServerManager.regionServerReport(ServerManager.java:253) a
    t org.apache.hadoop.hbase.master.MasterRpcServices.regionServerReport(MasterRpcServices.
          java:490) at org.apache.hadoop.hbase.shaded.protobuf.generated.
          RegionServerStatusProtos$RegionServerStatusService$2.callBlockingMethod(
          RegionServerStatusProtos.java:13139) at org.apache.hadoop.hbase.ipc.RpcServer.call(
          RpcServer.java:413) at org.apache.hadoop.hbase.ipc.CallRunner.run(CallRunner.java
    apache.hadoop.hbase.ipc.RpcExecutor$Handler.run(RpcExecutor.java:324) at org.apache.
12
          hadoop.hbase.ipc.RpcExecutor$Handler.run(RpcExecutor.java:304)
      at org.apache.hadoop.hbase.ipc.AbstractRpcClient.onCallFinished(AbstractRpcClient.java
13
            :387) at org.apache.hadoop.hbase.ipc.AbstractRpcClient.access$100(AbstractRpcClient
            .java:95) at org.apache.hadoop.hbase.ipc.AbstractRpcClient$3.run(AbstractRpcClient.
    java:410) at org.apache.hadoop.hbase.ipc.AbstractRpcClient$3.run(AbstractRpcClient.java
14
          :406) at org.apache.hadoop.hbase.ipc.Call.callComplete(Call.java:103) at org.apache.
          hadoop.hbase.ipc.Call.setException(Call.java:118) at org.apache.hadoop.hbase.ipc.
          NettyRpcDuplexHandler.readResponse(NettyRpcDuplexHandler.java:162) at org.apache.
          hadoop.hbase.ipc.NettyRpcDuplexHandler.channelRead(NettyRpcDuplexHa
    ndler.java:192) at org.apache.hbase.thirdparty.io.netty.channel.
          AbstractChannelHandlerContext.invokeChannelRead(AbstractChannelHandlerContext.java
          :359) at org.apache.hbase.thirdparty.io.netty.channel.AbstractChannelHandlerContext.
          invokeChannelRead(AbstractChannelHandlerContext.java:345) at org.apache.hbase.
          thirdparty.io.netty.channel.AbstractChannelHandlerContext.fireChannelRead(
          AbstractChannelHan
    dlerContext.java:337) at org.apache.hbase.thirdparty.io.netty.handler.codec.
          ByteToMessageDecoder.fireChannelRead(ByteToMessageDecoder.java:323) at org.apache.
          hbase.thirdparty.io.netty.handler.codec.ByteToMessageDecoder.channelRead(
          ByteToMessageDecoder.java:297) at org.apache.hbase.thirdparty.io.netty.channel.
          AbstractChannelHandlerContext.invokeChannelRead(AbstractChannelHandlerContext.java
          :359) at
      \verb|org.apache.hb| ase.th| irdparty.io.netty.channel.AbstractChannel Handler Context.
17
            invokeChannelRead(AbstractChannelHandlerContext.java:345) at org.apache.hbase.
            third party. io.netty. channel. Abstract Channel Handler Context. fire Channel Read (Manual Re
            AbstractChannelHandlerContext.java:337) at org.apache.hbase.thirdparty.io.netty.
            handler.timeout.IdleStateHandler.channelRead(IdleStateHandler.java:286) at org.
            apache.hbase.
    thirdparty.io.netty.channel.AbstractChannelHandlerContext.invokeChannelRead(
          AbstractChannelHandlerContext.java:359) at org.apache.hbase.thirdparty.io.netty.
          channel.AbstractChannelHandlerContext.invokeChannelRead(
          AbstractChannelHandlerContext.java:345) at org.apache.hbase.thirdparty.io.netty.
          \verb| channel.AbstractChannelHandlerContext.fireChannelRead(AbstractChannelHandlerContext.| \\
          java:337) at org.apache.
    hbase.thirdparty.io.netty.channel.DefaultChannelPipeline$HeadContext.channelRead(
          DefaultChannelPipeline.java:1408) at org.apache.hbase.thirdparty.io.netty.channel.
          AbstractChannelHandlerContext.invokeChannelRead(AbstractChannelHandlerContext.java
          :359) at org.apache.hbase.thirdparty.io.netty.channel.AbstractChannelHandlerContext.
          invokeChannelRead(AbstractChannelHandlerContext.java:345) at org.apache
```

hadoop.hbase.ipc.Ca

```
.hbase.thirdparty.io.netty.channel.DefaultChannelPipeline.fireChannelRead(
    DefaultChannelPipeline.java:930) at org.apache.hbase.thirdparty.io.netty.channel.
    epoll.AbstractEpollStreamChannel$EpollStreamUnsafe.epollInReady(
    AbstractEpollStreamChannel.java:796) at org.apache.hbase.thirdparty.io.netty.channel
    .epoll.EpollEventLoop.processReady(EpollEventLoop.java:427) at org.apache.hbase.
    thirdparty.io.net

ty.channel.epoll.EpollEventLoop.run(EpollEventLoop.java:328) at org.apache.hbase.
    thirdparty.io.netty.util.concurrent.SingleThreadEventExecutor$5.run(
    SingleThreadEventExecutor.java:905) at org.apache.hbase.thirdparty.io.netty.util.
    concurrent.FastThreadLocalRunnable.run(FastThreadLocalRunnable.java:30) ... 1
    more2020-10-31 08:27:05,139 ERROR org.apache.hadoop.hbase.regionserver.HRegionServer
    : Region

Server abort: loaded coprocessors are: [org.apache.hadoop.hbase.security.access.
    AccessController, org.apache.hadoop.hbase.security.token.TokenProvider, org.apache.hadoop.hbase.security.access.
```

### 1.3 Attachments

No attachments

#### 1.4 Comments

- 1. **zhangduo:** You are dead means HMaster thinks the Region Server is already dead, usually this is because the znode for this Region Server is gone. The kerberos problem here is not the direct cause of YouAreDeadException. You need to find out whether the connection to ZooKeeper is still fine.
- 2. **zhou0145:** [~zhangduo] The crash is caused by the remoteCallFailed method, not by the loss of ZK Node

```
2020-10-31 08:27:02,727 WARN org.apache.hadoop.hbase.master.assignment.
       UnassignProcedure: Expiring cc1,16020,1598832939674, pid=32631, ppid=32629,
       state=RUNNABLE:REGION_TRANSITION_DISPATCH, locked=true; UnassignProcedure table
       =dm_sn_lhq:t_agent_relation_info, region=26afdc58ffce14387748505bdc16cfb7,
       server=cc1,16020,1598832939674 rit=CLOSING, location=cc1,16020,1
   598832939674; exception=SaslException
3
   2020-10-31 08:27:02,728 WARN org.apache.hadoop.hbase.master.assignment.
       UnassignProcedure: Expiring cc1,16020,1598832939674, pid=32630, ppid=32629,
       state=RUNNABLE:REGION_TRANSITION_DISPATCH, locked=true; UnassignProcedure table
       =dm_sn_lhq:t_agent_relation_info, region=66e7cf0d6ad81f90b5aeca2c74f26af6,
       server=cc1,16020,1598832939674 rit=CLOSING, location=cc1,160
   20,1598832939674; exception=SaslException
   2020-10-31 08:27:02,729 INFO org.apache.hadoop.hbase.master.ServerManager:
       Processing expiration of cc1,16020,1598832939674 on bigdatan34
       ,16000,1598832940628
10
   2020-10-31 08:27:02,869 WARN org.apache.hadoop.hbase.master.ServerManager:
       Expiration called on cc1,16020,1598832939674 but crash processing in progress,
       serverStateNode=name=cc1, 16020, 1598832939674
   , state=ONLINE, regionCount=625
```