Item 324

git_comments:

git commits:

1. **summary:** catch bad version in persistentopic, make its behavior same as namespace (#3260) **message:** catch bad version in persistentopic, make its behavior same as namespace (#3260) ### Motivation Fixes #2952 make topic's behavior same as [Namespaces.java](https://github.com/apache/pulsar/blob/master/pulsar-broker/src/main/java/org/apache/pulsar/broker/admin/impl/NamespacesBase.java)

github_issues:

9.3.11.v20160721.jar:9.3.11.v20160721] at

1. title: Setting topic permission under load **body:** #### Expected behavior Do a REST call to admin interface for setting topic permissions like: https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole body: {'testrole': ['consume', 'produce']} Should work every time and return status 204. #### Actual behavior When this is done with heavy load setting up permission for many topics in parallel. Some will result in the below logged exception and status code 500. #### Steps to reproduce Set up tenant and namespace, then run the set permission for many different topics in that namespace in parallel. I use the same role and actions for all of them. #### System configuration pulsar: 2.2.0 This error was when running the broker in standalone mode in a docker container supplied on docker hub, with authorisation and authentication via client certs. Have not tested on our full pulsar setup yet. #### Logs 12:27:31.613 [pulsar-web-53-28] INFO org.apache.pulsar.broker.admin.impl.PersistentTopicsBase - [superUser] Successfully granted access for role testrole: [produce, consume] - topic persistent://tt1/testns1/t5\meta 12:27:31.587 [pulsar-web-53-30] ERROR org.apache.pulsar.broker.admin.impl.PersistentTopicsBase [superUser] Failed to grant permissions for topic persistent://tt1/testns1/t0\data org.apache.zookeeper.KeeperException\$BadVersionException: KeeperErrorCode = BadVersion for /admin/policies/tt1/testns1 at org.apache.zookeeper.KeeperException.create(KeeperException.java:118) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at org.apache.zookeeper.KeeperException.create(KeeperException.java:54) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at org.apache.zookeeper.ZooKeeper.setData(ZooKeeper.java:1336) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at org.apache.bookkeeper.zookeeper.ZooKeeperClient.access\$3101(ZooKeeperClient.java:70) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at org.apache.bookkeeper.Zookeeper.ZooKeeperClient\$21.call(ZooKeeperClient.java:1065) \sim [org.apache.bookkeeper-bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at org.apache.bookkeeper.ZooKeeperClient\$21.call(ZooKeeperClient.java:1059) \sim [org.apache.bookkeeper-bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at org.apache.bookkeeper.zookeeper.ZooWorker.syncCallWithRetries(ZooWorker.java:140) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at org.apache.bookkeeper.zookeeper.Zient.setData(ZooKeeperClient.java:1059) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at org.apache.pulsar.broker.admin.impl.PersistentTopicsBase.internalGrantPermissionsOnTopic(PersistentTopicsBase.java:274) [org.apache.pulsar-broker.admin.impl.PersistentTopicsBase.java:274) 2.2.0.jar:2.2.0] at org.apache.pulsar.broker.admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.gran 2.2.0.jar:2.2.0] at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method) ~[?:1.8.0_171] at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62) ~[?:1.8.0_171] at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43) ~[?:1.8.0_171] at java.lang.reflect.Method.invoke(Method.java:498) ~[?:1.8.0_171] at org.glassfish.jersey.server.model.internal.ResourceMethodInvocationHandlerFactory\$1.invoke(ResourceMethodInvocationHandlerFactory.java:81) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.internal.AbstractJavaResourceMethodDispatcher\$1.run(AbstractJavaResourceMethodDispatcher.java:144) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.internal.AbstractJavaResourceMethodDispatcher.invoke(AbstractJavaResourceMethodDispatcher.java:161) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.internal.JavaResourceMethodDispatcherProvider\$VoidOutInvoker.doDispatch(JavaResourceMethodDispatcherProvider.java:143) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org. glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher. dispatch (Abstract Java Resource Method Dispatcher. java: 99)[org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.invoke(ResourceMethodInvoker.java:389) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:347) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:102) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.ServerRuntime\$2.run(ServerRuntime.java:326) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] server-2.25.jar:?] at org.glassfish.jersey.internal.Errors\$1.call(Errors.java:271) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at org.glassfish.jersey.internal.Errors\$1.call(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at org.glassfish.jersey.internal.Errors.process(Errors.java:315) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at org.glassfish.jersey.internal.Errors.process(Errors.java:297) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at org.glassfish.jersey.internal.Errors.process(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at org.glassfish.jersey.process.internal.RequestScope.runInScope(RequestScope.java:317) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at org.glassfish.jersey.server.ServerRuntime.process(ServerRuntime.java:305) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.ApplicationHandler.handle(ApplicationHandler.java:1154) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.servlet.WebComponent.serviceImpl(WebComponent.java:473) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at org.glassfish.jersey.servlet.WebComponent.service(WebComponent.java:427) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:388) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at $org. glass fish. jersey. servlet. Servlet Container. service (Servlet Container. java: 341) \\ [org. glass fish. jersey. containers-jersey-container-servlet-core-2.25. jar:?] \\ at the property of the prope$ org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:228) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at org.eclipse.jetty.servlet.ServletHolder.handle(ServletHolder.java:845) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.servlet.ServletHandler\$CachedChain.doFilter(ServletHandler.java:1689) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at org.apache.pulsar.broker.web.ResponseHandlerFilter.doFilter(ResponseHandlerFilter.java:53) [org.apache.pulsar-broker-2.2.0.jar:2.2.0] at org.eclipse.jetty.servlet.ServletHandler\$CachedChain.doFilter(ServletHandler.java:1676) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] $at\ org. apache. pulsar-broker. web. Authentication Filter. (Authentication Filter. java: 74)\ [org. apache. pulsar-broker-common-2.2.0. jar: 2.2.0]\ at\ org. apache. pulsar-broker-common-2.2.0. jar: 2.2.0. jar:$ org.eclipse.jetty.servlet.ServletHandler\$CachedChain.doFilter(ServletHandler.java:1676) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.servlet.ServletHandler.doHandle(ServletHandler.java:581) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.session.SessionHandler.doHandle(SessionHandler.java:224) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.ContextHandler.doHandle(ContextHandler.java:1180) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.servlet.ServletHandler.doScope(ServletHandler.java:511) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.session.SessionHandler.doScope(SessionHandler.java:185) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar;9.3.11.v20160721] at org.eclipse.jetty.server.handler.ContextHandler.doScope(ContextHandler.java:1112) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.ScopedHandler.handle(ScopedHandler.java:141) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.ContextHandlerCollection.handle(ContextHandlerCollection.java:213) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerCollection.handle(HandlerCollection.java:119) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerWrapper.handle(HandlerWrapper.java:134) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.Server.handle(Server.java:524) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpChannel.handle(HttpChannel.java:319) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpConnection.onFillable(HttpConnection.java:253) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection\$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.space.getty-io.AbstractConnection.getty-io. jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.jo.ssl.SslConnection.onFillable(SslConnection.java:202) [org.eclipse.jetty-jetty-jo-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection\$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.java:273] jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.SelectChannelEndPoint\$2.run(SelectChannelEndPoint.java:93) [org.eclipse.jetty-jetty-io-

```
org.eclipse.jetty.util.thread.strategy. Execute Produce Consume. execute Produce Consume (Execute Produce Consume.java: 303) \\ [org.apache.pulsar-functions-consume] \\ [org.apache.pulsar-functions-consume]
       metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.produceConsume(ExecuteProduceConsume.java:148) [org.apache.pulsar-
       pulsar-functions-metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.run(ExecuteProduceConsume.java:136) [org.apache.pulsar-
       pulsar-functions-metrics-2.2.0.jar:?] at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1149) [?:1.8.0_171] at
        java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:624) [?:1.8.0_171] at
       io.netty.util.concurrent.FastThreadLocalRunnable.run(FastThreadLocalRunnable.java:30) [io.netty-netty-all-4.1.22.Final.jar:4.1.22.Final] at
       java.lang.Thread.run(Thread.java:748) [?:1.8.0_171] 12:27:31.669 [pulsar-web-53-27] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1
       [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t6%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-"
        "Python/3.7 aiohttp/3.4.2" 385 12:27:31.669 [pulsar-web-53-31] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST"
       https://localhost:8081/admin/v2/persistent/tt1/testns1/t7%5Cmeta/permissions/testrole HTTP/1.1" 500 5652 "-" "Python/3.7 aiohttp/3.4.2" 402 12:27:31.668
       [pulsar-web-53-29] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST
       https://localhost:8081/admin/v2/persistent/tt1/testns1/t8%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 371 12:27:31.643
       [pulsar-web-53-28] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST
       https://localhost:8081/admin/v2/persistent/tt1/testns1/t5%5Cmeta/permissions/testrole HTTP/1.1" 204 0 "-" "Python/3.7 aiohttp/3.4.2" 173 12:27:31.642 [pulsar-
       web-53-24] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST"
       https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 341
2. title: Setting topic permission under load
       body: #### Expected behavior Do a REST call to admin interface for setting topic permissions like:
       https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole body: {'testrole': ['consume', 'produce']} Should work every time and return
       status 204. #### Actual behavior When this is done with heavy load setting up permission for many topics in parallel. Some will result in the below logged
       exception and status code 500. #### Steps to reproduce Set up tenant and namespace, then run the set permission for many different topics in that namespace in
       parallel. I use the same role and actions for all of them. #### System configuration pulsar: 2.2.0 This error was when running the broker in standalone mode in a
       docker container supplied on docker hub, with authorisation and authentication via client certs. Have not tested on our full pulsar setup yet. #### Logs
        12:27:31.613 [pulsar-web-53-28] INFO org.apache.pulsar.broker.admin.impl.PersistentTopicsBase - [superUser] Successfully granted access for role testrole:
       [produce, consume] - topic persistent://tt1/testns1/t5\meta 12:27:31.587 [pulsar-web-53-30] ERROR org.apache.pulsar.broker.admin.impl.PersistentTopicsBase -
       [superUser] Failed to grant permissions for topic persistent://tt1/testns1/t0\data org.apache.zookeeper.KeeperException$BadVersionException: KeeperErrorCode
       = BadVersion\ for\ / admin/policies/tt1/testns1\ at\ org. apache. zookeeper. Keeper Exception. create (Keeper Exception. java: 118)\ \sim [org. apache. pulsar-pulsar-zookeeper-Keeper Exception. java: 118)\ \sim [org. apache. pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsa
       2.2.0.jar:2.2.0] at org.apache.zookeeper.KeeperException.create(KeeperException.java:54) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at
      org.apache.zooKeeper.ZooKeeper.SooKeeper.Java:1336) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at org.apache.bookkeeper.ZooKeeper.ZooKeeper.Client.access$3101(ZooKeeperClient.java:70) ~[org.apache.bookkeeper-bookkeeper-4.7.2.jar:4.7.2] at
       org.apache.bookkeeper.ZooKeeperClient\$21.call(ZooKeeperClient.java:1065) \\ \sim [org.apache.bookkeeper-bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at the contract of the con
       org.apache.bookkeeper.ZooKeeperClient\$21.call(ZooKeeperClient.java:1059) \sim [org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] \ at the contract of th
       org.apache.bookkeeper.zookeeper.ZooWorker.syncCallWithRetries(ZooWorker.java:140) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
       org. a pache. bookkee per. Zoo Keeper Client. set Data (Zoo Keeper Client. java: 1059) \\ \sim [org. a pache. bookkeeper-bookkeeper-bookkeeper-server-4.7.2. jar: 4.7.2] \\ at 2.5 \\ \sim [org. a pache. bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-boo
       org. apache. pulsar. broker. admin. impl. Persistent Topics Base. internal Grant Permissions On Topic (Persistent Topics Base. java: 274) \\ [org. apache. pulsar-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-
       2.2.0. jar:2.2.0] at org.apache.pulsar.broker.admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopic)OnTopic(PersistentTopic)Ontopic(PersistentTopic)Ontopic(PersistentOntopic)Ontop
       2.2.0.jar:2.2.0] at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method) ~[?:1.8.0_171] at
       sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62) ~[?:1.8.0_171] at
       sun.reflect. Delegating Method Accessor Impl. invoke (Delegating Method Accessor Impl. java: 43) \sim \cite{Continuous} (2:1.8.0\_171) at the continuous of the continuous and the continuous of t
       java.lang.reflect.Method.invoke(Method.java:498) ~[?:1.8.0_171] at
       org, glass fish, jersey. server. model. internal. Resource Method Invocation Handler Factory \$1. invoke (Resource Method Invocation Handler Factory, java: \$1)
       [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
       org, glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher $1. run (Abstract Java Resource Method Dispatcher. java: 144)
       [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
       org, glass fish, jersey. server. model. internal. Abstract Java Resource Method Dispatcher. invoke (Abstract Java Resource Method Dispatcher. java: 161) and the property of the property of
       [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
       org.glassfish.jersey.server.model.internal.JavaResourceMethodDispatcherProvider$VoidOutInvoker.doDispatch(JavaResourceMethodDispatcherProvider.java:143)
       [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
       org. glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher. dispatch (Abstract Java Resource Method Dispatcher. java: 99) \\
       [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.invoke(ResourceMethodInvoker.java:389)
       [org. glassfish.jersey.core-jersey-server-2.25.jar:?] at org. glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:347)
       [org. glassfish.jersey.core-jersey-server-2.25.jar:?] at org. glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:102)
       [org. glassfish.jersey.core-jersey-server-2.25.jar:?] at org. glassfish.jersey.server.ServerRuntime$2.run(ServerRuntime.java:326) [org. glassfish.jersey.core-jersey-server.Server.ServerRuntime.java:326) [org. glassfish.jersey.core-jersey-server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Se
       server-2.25.jar:?] at org.glassfish.jersey.internal.Errors$1.call(Errors.java:271) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
      org.glassfish.jersey.internal.Errors$1.call(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at org.glassfish.jersey.internal.Errors.process(Errors.java:315) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
       org. glass fish. jersey. internal. Errors. process (Errors. java: 297) \ [org. glass fish. jersey. core-jersey-common-2.25. jar:?] \ at the process of the
       org.glassfish.jersey.internal.Errors.process(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
       org.glassfish.jersey.process.internal.RequestScope.runInScope(RequestScope.java:317) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
       org. glass fish. jersey. server. Server Runtime. process (Server Runtime. java: 305) \ [org. glass fish. jersey. core-jersey-server-2.25. jar:?] \ at
       org.glassfish.jersey.server.ApplicationHandler.handle(ApplicationHandler.java:1154) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
       org.glassfish.jersey.servlet.WebComponent.serviceImpl(WebComponent.java:473) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
       org.glassfish.jersey.servlet.WebComponent.service(WebComponent.java:427) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
       org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:388) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
       org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:341) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
       org. glass fish. jersey. servlet. Servlet Container. service (Servlet Container. java: 228) \ [org. glass fish. jersey. containers-jersey-container-servlet-core-2.25. jar:?] \ at the container of the containe
       org.eclipse.jetty.servlet.ServletHolder.handle(ServletHolder.java:845) [org.eclipse.jetty-jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1689) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
       at org.apache.pulsar.broker.web.ResponseHandlerFilter.doFilter(ResponseHandlerFilter.java:53) [org.apache.pulsar-pulsar-broker-2.2.0.jar:2.2.0] at
       org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1676) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
       at org.apache.pulsar.broker.web.AuthenticationFilter.doFilter.duthenticationFilter.java:74) [org.apache.pulsar-pulsar-broker-common-2.2.0.jar:2.2.0] at
       org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1676) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
       at org.eclipse.jetty.servlet.ServletHandler.doHandle(ServletHandler.java:581) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.server.session. Session Handler. do Handle (Session Handler.java: 224) \\ [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar: 9.3.11.v20160721] \\ [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar: 9.3.11.v20160721] \\ [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar: 9.3.11.v20160721] \\ [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar: 9.3.11.v20160721.jar: 9.3.11.v20160721] \\ [org.eclipse.jetty-server-9.3.11.v20160721.jar: 9.3.11.v20160721.jar: 9.3.11.v20160721] \\ [org.eclipse.jetty-server-9.3.11.v20160721.jar: 9.3.11.v20160721.jar: 9
       org.eclipse.jetty.server.handler.ContextHandler.doHandle(ContextHandler.java:1180) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.servlet.ServletHandler.doScope(ServletHandler.java:511) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.server.session.SessionHandler.doScope(SessionHandler.java:185) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.server.handler.ContextHandler.doScope(ContextHandler.java:1112) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.server.handler.ScopedHandler.handle(ScopedHandler.java:141) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.server.handler.ContextHandlerCollection.handle(ContextHandlerCollection.java:213) [org.eclipse.jetty-jetty-server-
       9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerCollection.handle(HandlerCollection.java:119) [org.eclipse.jetty-jetty-server-
       9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerWrapper.handle(HandlerWrapper.java:134) [org.eclipse.jetty-jetty-server-
       9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.Server.handle(Server.java:524) [org.eclipse.jetty-jetty-server-
       9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpChannel.handle(HttpChannel.java:319) [org.eclipse.jetty-jetty-server-
       9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpConnection.onFillable(HttpConnection.java:253) [org.eclipse.jetty-jetty-server-
```

 $9.3.11.v20160721.jar; 9.3.11.v20160721] \ at \ org. eclipse.jetty. io. Abstract Connection \$ Read Callback. succeeded (Abstract Connection.java; 273) \ [org. eclipse.jetty.io] \ at \ org. eclipse.jetty.jo. Abstract Connection \$ Read Callback. succeeded (Abstract Connection.java; 273) \ [org. eclipse.jetty.jo.] \ at \ org. eclipse.jetty.jo. Abstract Connection \$ Read Callback. succeeded (Abstract Connection.java; 273) \ [org. eclipse.jetty.jo.] \ at \ org. eclipse.jetty.jo. Abstract Connection \$ Read Callback. succeeded (Abstract Connection.java; 273) \ [org. eclipse.jetty.jo.] \ at \ org. eclipse.jetty.jo. Abstract Connection \$ Read Callback. succeeded (Abstract Connection.java; 273) \ [org. eclipse.jetty.jo.] \ at \ org. \ at$

jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jetty-io-

```
9.3.11.v20160721.jar: 9.3.11.v20160721] \ at org. eclipse.jetty. io.ssl. SslConnection. on Fillable (SslConnection.java: 202) \ [org. eclipse.jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-
       9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.java:273]
       jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jo-
       9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.jo.SelectChannelEndPoint$2.run(SelectChannelEndPoint.java:93) [org.eclipse.jetty-jetty-jo-
       9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.util.thread.strategy. Execute Produce Consume.execute Produce Consume (Execute Produce Consume.java: 303) \\ [org.apache.pulsar-functions-consume] 
       metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.produceConsume(ExecuteProduceConsume.java:148) [org.apache.pulsar-
       pulsar-functions-metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.run(ExecuteProduceConsume.java:136) [org.apache.pulsar-
       pulsar-functions-metrics-2.2.0.jar:?] at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1149) [?:1.8.0_171] at
       java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:624) [?:1.8.0_171] at
       io. netty. util. concurrent. Fast Thread Local Runnable. run (Fast Thread Local Runnable. java: 30) \\ [io. netty-netty-all-4.1.22. Final. jar: 4.1.22. Final. jar: 4
       java.lang.Thread.run(Thread.java:748) [?:1.8.0_171] 12:27:31.669 [pulsar-web-53-27] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - -
       [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t6%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-"
      "Python/3.7 aiohttp/3.4.2" 385 12:27:31.669 [pulsar-web-53-31] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrole/breta/permissions/testrol
       https://localhost:8081/admin/v2/persistent/tt1/testns1/t8%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 371 12:27:31.643
       [pulsar-web-53-28] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST
       https://localhost:8081/admin/v2/persistent/tt1/testns1/t5%5Cmeta/permissions/testrole HTTP/1.1" 204 0 "-" "Python/3.7 aiohttp/3.4.2" 173 12:27:31.642 [pulsar-
       web-53-24] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST
       https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 341
3. title: Setting topic permission under load
       body: #### Expected behavior Do a REST call to admin interface for setting topic permissions like:
       https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole body: {'testrole': ['consume', 'produce']} Should work every time and return
       status 204. #### Actual behavior When this is done with heavy load setting up permission for many topics in parallel. Some will result in the below logged
       exception and status code 500. #### Steps to reproduce Set up tenant and namespace, then run the set permission for many different topics in that namespace in
       parallel. I use the same role and actions for all of them. #### System configuration pulsar: 2.2.0 This error was when running the broker in standalone mode in a
       docker container supplied on docker hub, with authorisation and authentication via client certs. Have not tested on our full pulsar setup yet. #### Logs
       12:27:31.613 [pulsar-web-53-28] INFO org.apache.pulsar.broker.admin.impl.PersistentTopicsBase - [superUser] Successfully granted access for role testrole:
       [produce, consume] - topic persistent://tt1/testns1/t5/meta 12:27:31.587 [pulsar-web-53-30] ERROR org.apache.pulsar.broker.admin.impl.PersistentTopicsBase -
       [superUser] \ Failed \ to \ grant \ permissions \ for \ topic \ persistent: //tt1/testns1/t0 \ data \ org. apache. zookeeper. Keeper Exception \ Bad \ Version Exception: \ Keeper Error Code
         = BadVersion for /admin/policies/tt1/testns1 at org.apache.zookeeper.KeeperException.create(KeeperException.java:118) ~[org.apache.pulsar-pulsar-zookeeper-
       2.2.0.jar:2.2.0] at org.apache.zookeeper.KeeperException.create(KeeperException.java:54) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at
       org.apache.zookeeper.ZooKeeper.setData(ZooKeeper.java:1336) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at org.apache.bookkeeper.zookeeper.ZooKeeperClient.access$3101(ZooKeeperClient.java:70) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
       org.apache.bookkeeper.zookeeper.ZooKeeperClient$21.call(ZooKeeperClient.java:1059) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
       org.apache.bookkeeper.zookeeper.ZooWorker.syncCallWithRetries(ZooWorker.java:140) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
       org. apache. bookkee per. Zoo Keeper Client. set Data (Zoo Keeper Client. java: 1059) \\ \sim [org. apache. bookkeeper-bookkeeper-bookkeeper-server-4.7.2. jar: 4.7.2] \\ at 2.5 \\ \sim [org. apache. bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookke
       org.apache.pulsar.broker.admin.impl.PersistentTopicsBase.internalGrantPermissionsOnTopic(PersistentTopicsBase.java:274) [org.apache.pulsar-proker-pulsar-broker-pulsar-broker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-pulsar-proker-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pul
       2.2.0. jar:2.2.0] at org.apache.pulsar.broker.admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107)]
       2.2.0.jar:2.2.0] at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method) ~[?:1.8.0_171] at
       sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62) ~[?:1.8.0_171] at
       sun.reflect. Delegating Method Accessor Impl. invoke (Delegating Method Accessor Impl. java: 43) \sim \cite{Continuous Method} (Polegating Method Accessor Impl. java: 43) \sim \cite{Continuous Method Accessor Impl. java: 43)} \sim \c
       java.lang.reflect.Method.invoke(Method.java:498) ~[?:1.8.0_171] at
       org, glassfish. jersey. server. model. internal. Resource Method Invocation Handler Factory, $1. invoke (Resource Method Invocation Handler Factory, java: 81)
       [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
       org.glassfish.jersey.server.model.internal.AbstractJavaResourceMethodDispatcher$1.run(AbstractJavaResourceMethodDispatcher.java:144)
       [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
       org. glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher. invoke (Abstract Java Resource Method Dispatcher. java: 161) and the property of the property of
       [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
       org. glass fish. jersey. server. model. internal. Java Resource Method Dispatcher Provider \$VoidOut Invoker. do Dispatch (Java Resource Method Dispatcher Provider. java: 143)
       [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
       org. glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher. dispatch (Abstract Java Resource Method Dispatcher. java: 99)\\
       [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.invoke(ResourceMethodInvoker.java:389)
        [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:347)
        [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:102)
       [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.ServerRuntime$2.run(ServerRuntime.java:326) [org.glassfish.jersey.core-jersey-server.Server.ServerRuntime.java:326) [org.glassfish.jersey.core-jersey-server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server
       server-2.25.jar:?] at org.glassfish.jersey.internal.Errors$1.call(Errors.java:271) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
       org. glass fish. jersey. internal. Errors \$1. call (Errors. java: 267) \ [org. glass fish. jersey. core-jersey-common-2.25. jar:?] \ at the property of the 
       org.glassfish.jersey.internal.Errors.process(Errors.java:315) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
       org.glassfish.jersey.internal.Errors.process(Errors.java:297) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
       org.glassfish.jersey.internal.Errors.process(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
       org.glassfish.jersey.process.internal.RequestScope.runInScope(RequestScope.java:317) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
       org.glassfish.jersey.server.ServerRuntime.process(ServerRuntime.java:305) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
       org. glass fish. jersey. server. Application Handler. handle (Application Handler. java: 1154) \ [org. glass fish. jersey. core-jersey-server-2.25. jar:?] \ at the property of the property
       org, glassfish.jersey.servlet.WebComponent.serviceImpl(WebComponent.java:473) [org, glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
       org.glassfish.jersey.servlet.WebComponent.service(WebComponent.java:427) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:388) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
       org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:341) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
       org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:228) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
       org.eclipse.jetty.servlet.ServletHolder.handle(ServletHolder.java:845) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1689) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
       at org.apache.pulsar.broker.web.ResponseHandlerFilter.doFilter(ResponseHandlerFilter.java:53) [org.apache.pulsar-pulsar-broker-2.2.0.jar:2.2.0] at
       org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1676) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
       at org.apache.pulsar.broker.web.AuthenticationFilter.doFilter.duthenticationFilter.java:74) [org.apache.pulsar-pulsar-broker-common-2.2.0.jar:2.2.0] at
       org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1676) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
       at\ org. eclipse.jetty.servlet. Servlet Handler. do Handle (Servlet Handler.java: 581)\ [org. eclipse.jetty-jetty-jetty-servlet-9.3.11.v20160721.jar: 9.3.11.v20160721]\ at\ org. eclipse.jetty-servlet. Servlet Handler. do Handle (Servlet Handler.java: 581)\ [org. eclipse.jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jet
       org.eclipse.jetty.server.session.SessionHandler.doHandle(SessionHandler.java:224) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.server.handler.ContextHandler.doHandle(ContextHandler.java:1180) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.servlet.ServletHandler.doScope(ServletHandler.java:511) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.server.session.SessionHandler.doScope(SessionHandler.java:185) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar;9.3.11.v20160721] at
       org.eclipse.jetty.server.handler.ContextHandler.doScope(ContextHandler.java:1112) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.server.handler.ScopedHandler.handle(ScopedHandler.java:141) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.server.handler.ContextHandlerCollection.handle(ContextHandlerCollection.java:213) [org.eclipse.jetty-jetty-server-
       9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerCollection.handle(HandlerCollection.java:119) [org.eclipse.jetty-jetty-server-
```

9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerWrapper.handle(HandlerWrapper.java:134) [org.eclipse.jetty-jetty-server-

```
9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.Server.handle(Server.java:524) [org.eclipse.jetty-jetty-server-
        9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpChannel.handle(HttpChannel.java:319) [org.eclipse.jetty-jetty-server-
        9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpConnection.onFillable(HttpConnection.java:253) [org.eclipse.jetty-jetty-server-
        9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.java:273]
        jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jetty-io-
        9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.ssl.SslConnection.onFillable(SslConnection.java:202) [org.eclipse.jetty-jetty-io-
        9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.
        jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jetty-io-
        9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.SelectChannelEndPoint$2.run(SelectChannelEndPoint.java:93) [org.eclipse.jetty-jetty-io-
        9.3.11.v20160721.jar:9.3.11.v20160721] at
        org.eclipse.jetty.util.thread.strategy. Execute Produce Consume.execute Produce Consume (Execute Produce Consume.java: 303) \\ [org.apache.pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pulsar-functions-pu
        metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.produceConsume(ExecuteProduceConsume.java:148) [org.apache.pulsar-
        pulsar-functions-metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.run(ExecuteProduceConsume.java:136) [org.apache.pulsar-
        pulsar-functions-metrics-2.2.0.jar:?] at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1149) [?:1.8.0_171] at
        java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:624) [?:1.8.0_171] at
         io.netty.util.concurrent.FastThreadLocalRunnable.run(FastThreadLocalRunnable.java:30) [io.netty-netty-all-4.1.22.Final.jar:4.1.22.Final] at
        java.lang.Thread.run(Thread.java:748) [?:1.8.0_171] 12:27:31.669 [pulsar-web-53-27] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1
        [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t6%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-"
         "Python/3.7 aiohttp/3.4.2" 385 12:27:31.669 [pulsar-web-53-31] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST"
        https://localhost:8081/admin/v2/persistent/tt1/testns1/t7%5Cmeta/permissions/testrole HTTP/1.1" 500 5652 "-" "Python/3.7 aiohttp/3.4.2" 402 12:27:31.668
       [pulsar-web-53-29] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t8%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 371 12:27:31.643
        [pulsar-web-53-28]\ INFO\ org.eclipse.jetty.server. RequestLog-172.17.0.1--[07/Nov/2018:12:27:31\ +0000]\ "POST-172.17.0.1--[07/Nov/2018:12:27:31\ +0000]\ "POST-172.17.0.1--[07/Nov/2018:12:27:31]\ "POST-172.17.0.1--[07/Nov/2018:12:27:31]\ "POST-172.17.0.1--[07/Nov/2018:12:27:31]\ "POST-172.17.0.1--[07/Nov/2018:12:27:31]\ "POST-
        https://localhost:8081/admin/v2/persistent/tt1/testns1/t5%5Cmeta/permissions/testrole HTTP/1.1" 204 0 "-" "Python/3.7 aiohttp/3.4.2" 173 12:27:31.642 [pulsar-
        web-53-24] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST
        https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 341
4. title: Setting topic permission under load
        body: #### Expected behavior Do a REST call to admin interface for setting topic permissions like:
        https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole body: {'testrole': ['consume', 'produce']} Should work every time and return
        status 204. #### Actual behavior When this is done with heavy load setting up permission for many topics in parallel. Some will result in the below logged
        exception and status code 500. #### Steps to reproduce Set up tenant and namespace, then run the set permission for many different topics in that namespace in
        parallel. I use the same role and actions for all of them. #### System configuration pulsar: 2.2.0 This error was when running the broker in standalone mode in a
        docker container supplied on docker hub, with authorisation and authentication via client certs. Have not tested on our full pulsar setup yet. #### Logs
        12:27:31.613 [pulsar-web-53-28] INFO org.apache.pulsar.broker.admin.impl.PersistentTopicsBase - [superUser] Successfully granted access for role testrole: [produce, consume] - topic persistent://tt1/testns1/t5\meta 12:27:31.587 [pulsar-web-53-30] ERROR org.apache.pulsar.broker.admin.impl.PersistentTopicsBase -
        [superUser] \ Failed \ to \ grant \ permissions \ for \ topic \ persistent: //tt1/testns1/t0 \ data \ org. apache. zookeeper. Keeper Exception \ Bad \ Version Exception: \ Keeper Error Code
            BadVersion for /admin/policies/tt1/testns1 at org.apache.zookeeper.KeeperException.create(KeeperException.java:118) ~[org.apache.pulsar-pulsar-zookeeper-
        2.2.0.jar:2.2.0] at org.apache.zookeeper.KeeperException.create(KeeperException.java:54) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at
        org.apache.zookeeper.ZooKeeper.set Data (ZooKeeper.java:1336) \sim [org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] \ at the contemporary of th
        org.apache.bookkeeper.zookeeper.ZooKeeperClient.access$3101(ZooKeeperClient.java:70) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
        org.apache.bookkeeper.zookeeper.ZooKeeperClient$21.call(ZooKeeperClient.java:1065) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
        org.apache.bookkeeper.zookeeper.ZooKeeperClient$21.call(ZooKeeperClient.java:1059) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
        org.apache.bookkeeper.zookeeper.ZooWorker.syncCallWithRetries(ZooWorker.java:140) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
        org.apache.bookkeeper.zookeeper.ZooKeeperClient.setData(ZooKeeperClient.java:1059) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
        org. apache. pulsar. broker. admin. impl. Persistent Topics Base. internal Grant Permissions On Topic (Persistent Topics Base. java: 274) \\ [org. apache. pulsar-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-
        2.2.0.jar:2.2.0] at org.apache.pulsar.broker.admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic)OnTopic(PersistentTopics.grantPermissionsOnTopic)OnTopic(PersistentTopics.grantPermissionsOnTopic)OnTopic(PersistentOnTopic)OnTopic(PersistentOnTopic)OnTopic(PersistentOnTopic)OnTopic(P
        2.2.0.jar:2.2.0] at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method) ~[?:1.8.0_171] at
        sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62) ~[?:1.8.0_171] at
        sun.reflect. Delegating Method Accessor Impl. invoke (Delegating Method Accessor Impl. java: 43) \sim \cite{Continuous Method} (Polegating Method Accessor Impl. java: 43) \sim \cite{Continuous Method Accessor Impl. java: 43)} \sim \c
        java.lang.reflect.Method.invoke(Method.java:498) ~[?:1.8.0_171] at org.glassfish.jersey.server.model.internal.ResourceMethodInvocationHandlerFactory.java:81)
        [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
        org, glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher $1. run (Abstract Java Resource Method Dispatcher. java: 144)
        [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
        org. glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher. invoke (Abstract Java Resource Method Dispatcher. java: 161) and the property of the property of
        [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
        org.glassfish.jersey.server.model.internal.JavaResourceMethodDispatcherProvider$VoidOutInvoker.doDispatch(JavaResourceMethodDispatcherProvider.java:143)
        [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
        org.glassfish.jersey.server.model.internal.AbstractJavaResourceMethodDispatcher.dispatch(AbstractJavaResourceMethodDispatcher.java:99)
        [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.invoke(ResourceMethodInvoker.java:389)
        [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:347)
        [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:102)
        [org. glassfish.jersey.core-jersey-server-2.25.jar:?] at org. glassfish.jersey.server.ServerRuntime$2.run(ServerRuntime.java:326) [org. glassfish.jersey.core-jersey-server.Server.ServerRuntime.java:326) [org. glassfish.jersey.core-jersey-server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Se
        server-2.25.jar:?] at org.glassfish.jersey.internal.Errors$1.call(Errors.java:271) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
        org.glassfish.jersey.internal.Errors$1.call(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
        org. glass fish. jersey. internal. Errors. process (Errors. java: 315) \ [org. glass fish. jersey. core-jersey-common-2.25. jar:?] \ at the process of the
        org.glassfish.jersey.internal.Errors.process(Errors.java:297) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
        org.glassfish.jersey.internal.Errors.process(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
        org.glassfish.jersey.process.internal.RequestScope.runInScope(RequestScope.java:317) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
        org.glass fish.jersey.server. Server Runtime.process (Server Runtime.java: 305) \ [org.glass fish.jersey.core-jersey-server-2.25.jar:?] \ at the continuous process (Server Runtime.java: 305) \ [org.glass fish.jersey.core-jersey-server-2.25.jar:?] \ at the continuous process (Server Runtime.java: 305) \ [org.glass fish.jersey.core-jersey-server-2.25.jar:?] \ at the continuous process (Server Runtime.java: 305) \ [org.glass fish.jersey.core-jersey-server-2.25.jar:?] \ at the continuous process (Server Runtime.java: 305) \ [org.glass fish.jersey.core-jersey-server-2.25.jar:?] \ at the continuous process (Server Runtime.java: 305) \ [org.glass fish.jersey.core-jersey-server-2.25.jar:?] \ at the continuous process (Server Runtime.java: 305) \ [org.glass fish.jersey.core-jersey-server-2.25.jar:?] \ at the continuous process (Server Runtime.java: 305) \ [org.glass fish.jersey.core-jersey-server-2.25.jar:?] \ at the continuous process (Server Runtime.java: 305) \ [org.glass fish.jersey.core-jersey-server-2.25.jar:?] \ at the continuous process (Server Runtime.java: 305) \ [org.glass fish.jersey.core-jersey-server-2.25.jar:?] \ at the continuous process (Server Runtime.java: 305) \ [org.glass fish.jersey.core-jersey-server-2.25.jar:?] \ at the continuous process (Server Runtime.java: 305) \ [org.glass fish.jersey.core-jersey-server-2.25.jar:?] \ at the continuous process (Server Runtime.java: 305) \ [org.glass fish.jersey.core-jersey-server-2.25.jar:?] \ at the continuous process (Server Runtime.java: 305) \ [org.glass fish.jersey.core-jersey-server-2.25.jar:?] \ at the continuous process (Server Runtime.java: 305) \ [org.glass fish.jersey.core-jersey-server-2.25.jar:?] \ at the continuous process (Server Runtime.java: 305) \ [org.glass fish.jersey.core-jersey-server-2.25.jar:?] \ at the continuous process (Server Runtime.java: 305) \ [org.glass fish.jersey.core-jersey-server-2.25.jar:?] \ at the continuous process (Server Runtime.java: 305) \ [org.glass fish.jersey.core-jersey-server-2.25.jar:?] \ at the continuous p
        org.glassfish.jersey.server.ApplicationHandler.handle(ApplicationHandler.java:1154) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
        org.glassfish.jersey.servlet.WebComponent.serviceImpl(WebComponent.java:473) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
        org. glass fish. jersey. servlet. Web Component. jersey. containers-jersey-containers-jersey-container-servlet-core-2.25. jar:?] \ at the container of the co
        org. glass fish. jersey. servlet. Servlet Container. service (Servlet Container. java: 388) \ [org. glass fish. jersey. containers-jersey-container-servlet-core-2.25. jar:?] \ at the container of the containe
        org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:341) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
       org. glass fish. jersey. servlet. Servlet Container. service (Servlet Container. java: 228) \ [org. glass fish. jersey. containers-jersey-container-servlet-core-2.25. jar:?] \ at org. eclipse. jetty. servlet. Servlet Holder. handle (Servlet Holder. java: 845) \ [org. eclipse. jetty-jetty-servlet-9.3.11.v20160721. jar: 9.3.11.v20160721] \ at
        org.eclipse.jetty.servlet.ServletHandler\\ \$CachedChain.doFilter\\ (ServletHandler.java:1689) \ [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
        at\ org. apache. pulsar. broker. web. Response Handler Filter. (Response Handler Filter. java: 53)\ [org. apache. pulsar-pulsar-broker-2.2.0. jar: 2.2.0]\ at\ org. apache. pulsar-broker-2.2.0. jar: 2.2.0. ja
        org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1676) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
        at org.apache.pulsar.broker.web.AuthenticationFilter.doFilter.duthenticationFilter.java:74) [org.apache.pulsar-pulsar-broker-common-2.2.0.jar:2.2.0] at
        org.eclipse.jetty.servlet.ServletHandler\\ \$CachedChain.doFilter\\ (ServletHandler.java:1676)\\ [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]\\
        at\ org. eclipse.jetty.servlet. Servlet Handler. do Handler. java: 581)\ [org. eclipse.jetty-servlet-9.3.11.v20160721.jar: 9.3.11.v20160721]\ at\ org. eclipse.jetty-servlet-9.3.11.v20160721.jar: 9.3.11.v20160721.jar: 9.3
        org.eclipse.jetty.server.session.SessionHandler.doHandle(SessionHandler.java:224) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
        org.eclipse.jetty.server.handler.ContextHandler.doHandle(ContextHandler.java:1180) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
        org.eclipse.jetty.servlet.ServletHandler.doScope(ServletHandler.java:511) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
```

 $org. eclipse. jetty. server. session. Session Handler. do Scope (Session Handler. java: 185) \ [org. eclipse. jetty-jetty-server-9.3.11.v20160721. jar: 9.3.11.v20160721] \ at the property of the property$

```
org.eclipse.jetty.server.handler.Context Handler.doScope (Context Handler.java: 1112) \\ [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar: 9.3.11.v20160721] \\ [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar: 9.3.11.v20160721] \\ [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar: 9.3.11.v20160721] \\ [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar: 9.3.11.v20160721] \\ [org.eclipse.jetty-server-9.3.11.v20160721.jar: 9.3.11.v20160721.jar: 9.3.11.v201607
      org. eclipse. jetty. server. handler. Scoped Handler. handle (Scoped Handler. java: 141) \\ [org. eclipse. jetty-jetty-server-9.3.11. v 20160721. jar: 9.3.11. v 20160721] \\ [attitude a transfer of the proposition of the p
      org.eclipse.jetty.server.handler.ContextHandlerCollection.handle(ContextHandlerCollection.java:213) [org.eclipse.jetty-jetty-server.handler.ContextHandlerCollection.java:213)
      9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerCollection.handle(HandlerCollection.java:119) [org.eclipse.jetty-jetty-server-
      9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerWrapper.handle(HandlerWrapper.java:134) [org.eclipse.jetty-jetty-server-
      9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.Server.handle(Server.java:524) [org.eclipse.jetty-jetty-server.
      9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpChannel.handle(HttpChannel.java:319) [org.eclipse.jetty-jetty-server-
      9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpConnection.onFillable(HttpConnection.java:253) [org.eclipse.jetty-jetty-server-
      9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-
      jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jetty-io-
      9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.ssl.SslConnection.onFillable(SslConnection.java:202) [org.eclipse.jetty-jetty-io-
      9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-
      jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jetty-io-
      9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.jo.SelectChannelEndPoint$2.run(SelectChannelEndPoint.java:93) [org.eclipse.jetty-jo-
      9.3.11.v20160721.jar:9.3.11.v20160721] at
      org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.executeProduceConsume(ExecuteProduceConsume.java:303) [org.apache.pulsar-functions-
      metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.produceConsume(ExecuteProduceConsume.java:148) [org.apache.pulsar-
      pulsar-functions-metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.run(ExecuteProduceConsume.java:136) [org.apache.pulsar-functions-metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.run(ExecuteProduceConsume.java:136)
      pulsar-functions-metrics-2.2.0.jar:?] at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1149) [?:1.8.0_171] at
      java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:624) [?:1.8.0_171] at
      io.netty.util.concurrent.FastThreadLocalRunnable.run(FastThreadLocalRunnable.java:30) [io.netty-netty-all-4.1.22.Final.jar:4.1.22.Final] at
      java.lang.Thread.run(Thread.java:748) [?:1.8.0_171] 12:27:31.669 [pulsar-web-53-27] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - -
      [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t6%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-"
      "Python/3.7 aiohttp/3.4.2" 385 12:27:31.669 [pulsar-web-53-31] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t7%5Cmeta/permissions/testrole HTTP/1.1" 500 5652 "-" "Python/3.7 aiohttp/3.4.2" 402 12:27:31.668
     [pulsar-web-53-29] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t8%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 371 12:27:31.643
      [pulsar-web-53-28] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST
      https://localhost:8081/admin/v2/persistent/tt1/testns1/t5%5Cmeta/permissions/testrole HTTP/1.1" 204 0 "-" "Python/3.7 aiohttp/3.4.2" 173 12:27:31.642 [pulsar-
      web-53-24] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST
      https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 341
5. title: Setting topic permission under load
      body: #### Expected behavior Do a REST call to admin interface for setting topic permissions like:
      https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole body: {'testrole': ['consume', 'produce']} Should work every time and return
      status 204. #### Actual behavior When this is done with heavy load setting up permission for many topics in parallel. Some will result in the below logged
      exception and status code 500. #### Steps to reproduce Set up tenant and namespace, then run the set permission for many different topics in that namespace in
      parallel. I use the same role and actions for all of them. #### System configuration pulsar: 2.2.0 This error was when running the broker in standalone mode in a
      docker container supplied on docker hub, with authorisation and authentication via client certs. Have not tested on our full pulsar setup yet. #### Logs
      12:27:31.613 [pulsar-web-53-28] INFO org.apache.pulsar.broker.admin.impl.PersistentTopicsBase - [superUser] Successfully granted access for role testrole:
      [produce, consume] - topic persistent://tt1/testns1/t5\meta 12:27:31.587 [pulsar-web-53-30] ERROR org.apache.pulsar.broker.admin.impl.PersistentTopicsBase -
      [superUser] Failed to grant permissions for topic persistent://tt1/testns1/t0\data org.apache.zookeeper.KeeperException$BadVersionException: KeeperErrorCode
       = BadVersion for /admin/policies/tt1/testns1 at org.apache.zookeeper.KeeperException.create(KeeperException.java:118) ~[org.apache.pulsar-pulsar-zookeeper-
      2.2.0.jar:2.2.0] at org.apache.zookeeper.KeeperException.create(KeeperException.java:54) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at
      org.apache.zookeeper.ZooKeeper.setData(ZooKeeper.java:1336) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at
      org. apache. bookkeeper. Zookeeper. Zookeeper. Zookeeper. Zior. 4.7.2. jar: 
      org.apache.bookkeeper.zookeeper.ZooKeeperClient$21.call(ZooKeeperClient.java:1065) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
     org.apache.bookkeeper.ZooKeeperClient$21.call(ZooKeeperClient.java:1059) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at org.apache.bookkeeper.ZooWorker.syncCallWithRetries(ZooWorker.java:140) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
      org.apache.bookkeeper.ZooKeeperClient.setData(ZooKeeperClient.java:1059) \sim [org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] \ at the contract of th
      org.apache.pulsar.broker.admin.impl.PersistentTopicsBase.internalGrantPermissionsOnTopic(PersistentTopicsBase.java:274) [org.apache.pulsar-broker-
      2.2.0. jar:2.2.0] at org.apache.pulsar.broker.admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic)Ontopic(PersistentTopics.grantPermission
      2.2.0.jar:2.2.0] at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method) ~[?:1.8.0_171] at
      sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62) ~[?:1.8.0_171] at
      sun.reflect. Delegating Method Accessor Impl. invoke (Delegating Method Accessor Impl. java: 43) \sim [?:1.8.0\_171] \ at the property of the pr
     java.lang.reflect.Method.invoke(Method.java:498) ~[?:1.8.0_171] at org.glassfish.jersey.server.model.internal.ResourceMethodInvocationHandlerFactory$1.invoke(ResourceMethodInvocationHandlerFactory.java:81)
      [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
      org, glass fish. jersey.server.model.internal.AbstractJavaResourceMethodDispatcher$1.run(AbstractJavaResourceMethodDispatcher.java:144)
      [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
      org. glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher. invoke (Abstract Java Resource Method Dispatcher. java: 161) and the property of the property of
      [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
      org, glassfish.jersey.server.model.internal.JavaResourceMethodDispatcherProvider$VoidOutInvoker.doDispatch(JavaResourceMethodDispatcherProvider.java:143)
      [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
      org.glassfish.jersey.server.model.internal.AbstractJavaResourceMethodDispatcher.dispatch(AbstractJavaResourceMethodDispatcher.java:99)
      [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.invoke(ResourceMethodInvoker.java:389)
       [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:347)
      [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:102)
      [org. glass fish. jersey. core-jersey-server-2.25. jar:?] \ at \ org. glass fish. jersey. server. Server Runtime \$2. run (Server Runtime. java: 326) \ [org. glass fish. jersey. core-jersey-server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. glass fish. jersey. server-2.25. jar:?] \ at \ org. gla
      server-2.25.jar:?] at org.glassfish.jersey.internal.Errors$1.call(Errors.java:271) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
      org.glassfish.jersey.internal.Errors$1.call(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
      org.glassfish.jersey.internal.Errors.process(Errors.java:315) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
      org.glassfish.jersey.internal.Errors.process(Errors.java:297) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
      org.glassfish.jersey.internal.Errors.process(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
      org.glassfish.jersey.process.internal.RequestScope.runInScope(RequestScope.java:317) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
      org.glassfish.jersey.server.ServerRuntime.process(ServerRuntime.java:305) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
      org.glassfish.jersey.server.ApplicationHandler.handle(ApplicationHandler.java:1154) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
      org.glassfish.jersey.servlet.WebComponent.serviceImpl(WebComponent.java:473) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
      org. glass fish. jersey. servlet. Web Component. jersey. containers-jersey-containers-jersey-container-servlet-core-2.25. jar:?] \ at the container of the co
      org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:388) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
      org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:341) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
     org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:228) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at org.eclipse.jetty.servlet.ServletHolder.handle(ServletHolder.java:845) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
      org.eclipse.jetty.servlet.ServletHandler\\ \$CachedChain.doFilter\\ (ServletHandler.java:1689) \ [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
      at org.apache.pulsar.broker.web.ResponseHandlerFilter.doFilter(ResponseHandlerFilter.java:53) [org.apache.pulsar-pulsar-broker-2.2.0.jar:2.2.0] at
      org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1676) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
      at org.apache.pulsar.broker.web.AuthenticationFilter.doFilter(AuthenticationFilter.java:74) [org.apache.pulsar-pulsar-broker-common-2.2.0.jar:2.2.0] at
```

 $org.eclipse.jetty.servlet.ServletHandler\\ \$CachedChain.doFilter\\ (ServletHandler.java:1676)\\ [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]\\$

```
at\ org. eclipse. jetty. servlet. Servlet Handler. do Handler. java: 581)\ [org. eclipse. jetty-jetty-jetty-servlet-9.3.11. v20160721. jar: 9.3.11. v20160721]\ at\ org. eclipse. jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-
       org.eclipse.jetty.server.session.SessionHandler.doHandle(SessionHandler.java:224) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.server.handler.ContextHandler.doHandle(ContextHandler.java:1180) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.servlet.ServletHandler.doScope(ServletHandler.java:511) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.server.session.SessionHandler.doScope(SessionHandler.java:185) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.server.handler.ContextHandler.doScope(ContextHandler.java:1112) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.server.handler.ScopedHandler.handle(ScopedHandler.java:141) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.server.handler.ContextHandlerCollection.handle(ContextHandlerCollection.java:213) [org.eclipse.jetty-jetty-server-
       9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerCollection.handle(HandlerCollection.java:119) [org.eclipse.jetty-jetty-server-
       9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerWrapper.handle(HandlerWrapper.java:134) [org.eclipse.jetty-jetty-server-
       9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.Server.handle(Server.java:524) [org.eclipse.jetty-jetty-server.
       9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpChannel.handle(HttpChannel.java:319) [org.eclipse.jetty-jetty-server-
       9.3.11.v20160721.jar; 9.3.11.v20160721] \ at org. eclipse.jetty.server. Http Connection. on Fillable (Http Connection.java: 253) \ [org. eclipse.jetty-jetty-server-like the connection of the
       9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-
       jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jetty-io-
       9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.ssl.SslConnection.onFillable(SslConnection.java:202) [org.eclipse.jetty-jetty-io-
       9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.specific properties of the content of the
       jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jetty-io-
       9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.jo.SelectChannelEndPoint$2.run(SelectChannelEndPoint.java:93) [org.eclipse.jetty-jetty-jo-
       9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.executeProduceConsume[ExecuteProduceConsume.java:303] [org.apache.pulsar-functions-
       metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume,produceConsume(ExecuteProduceConsume,java:148) [org.apache.pulsar-
       pulsar-functions-metrics-2.2.0,jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.run(ExecuteProduceConsume.java:136) [org.apache.pulsar-
       pulsar-functions-metrics-2.2.0.jar:?] at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1149) [?:1.8.0_171] at
       java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:624) [?:1.8.0_171] at
       io. netty. util. concurrent. Fast Thread Local Runnable. run (Fast Thread Local Runnable. java: 30) \\ [io. netty-netty-all-4.1.22. Final. jar: 4.1.22. Final. jar: 4
       java.lang.Thread.run(Thread.java:748) [?:1.8.0_171] 12:27:31.669 [pulsar-web-53-27] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1
       [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t6%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-"
      "Python/3.7 aiohttp/3.4.2" 385 12:27:31.669 [pulsar-web-53-31] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t7%5Cmeta/permissions/testrole HTTP/1.1" 500 5652 "-" "Python/3.7 aiohttp/3.4.2" 402 12:27:31.668
       [pulsar-web-53-29] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST
       https://localhost:8081/admin/v2/persistent/tt1/testns1/t8%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 371 12:27:31.643
       [pulsar-web-53-28] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST"
       https://localhost:8081/admin/v2/persistent/tt1/testns1/t5%5Cmeta/permissions/testrole HTTP/1.1" 204 0 "-" "Python/3.7 aiohttp/3.4.2" 173 12:27:31.642 [pulsar-
       web-53-24] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST
       https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 341
6. title: Setting topic permission under load
       body: #### Expected behavior Do a REST call to admin interface for setting topic permissions like:
       https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole body: {'testrole': ['consume', 'produce']} Should work every time and return
       status 204. #### Actual behavior When this is done with heavy load setting up permission for many topics in parallel. Some will result in the below logged
       exception and status code 500. #### Steps to reproduce Set up tenant and namespace, then run the set permission for many different topics in that namespace in
       parallel. I use the same role and actions for all of them. #### System configuration pulsar: 2.2.0 This error was when running the broker in standalone mode in a
       docker container supplied on docker hub, with authorisation and authentication via client certs. Have not tested on our full pulsar setup yet. #### Logs
        12:27:31.613 [pulsar-web-53-28] INFO org.apache.pulsar.broker.admin.impl.PersistentTopicsBase - [superUser] Successfully granted access for role testrole:
       [produce, consume] - topic persistent://tt1/testns1/t5\meta 12:27:31.587 [pulsar-web-53-30] ERROR org.apache.pulsar.broker.admin.impl.PersistentTopicsBase -
       [superUser] Failed to grant permissions for topic persistent://tt1/testns1/t0\data org.apache.zookeeper.KeeperException$BadVersionException: KeeperErrorCode
       = BadVersion\ for\ /admin/policies/tt1/testns1\ at\ org.apache.zookeeper. Keeper Exception.create(Keeper Exception.java:118)\ \sim [org.apache.pulsar-zookeeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keeper-Keep
       2.2.0.jar:2.2.0] at org.apache.zookeeper.KeeperException.create(KeeperException.java:54) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at
      org.apache.zookeeper.ZooKeeper.ZooKeeper.ZooKeeper.Java:1336) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at org.apache.bookkeeper.ZooKeeper.ZooKeeper.ZooKeeper.Java:1336) ~[org.apache.bookkeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.Jookeeper.
       org.apache.bookkeeper.zookeeper.ZooKeeperClient$21.call(ZooKeeperClient.java:1065) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at org.apache.bookkeeper.zookeeper.ZooKeeperClient$21.call(ZooKeeperClient.java:1059) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
       org.apache.bookkeeper.zookeeper.ZooWorker.syncCallWithRetries(ZooWorker.java:140) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
       org.apache.bookkeeper.ZooKeeperClient.setData(ZooKeeperClient.java:1059) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
       org. apache. pulsar. broker. admin. impl. Persistent Topics Base. internal Grant Permissions On Topic (Persistent Topics Base. java: 274) \\ [org. apache. pulsar-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-
       2.2.0. jar:2.2.0] at org.apache.pulsar.broker.admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic
       2.2.0.jar:2.2.0] at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method) ~[?:1.8.0_171] at
       sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62) ~[?:1.8.0_171] at
       sun.reflect. Delegating Method Accessor Impl. invoke (Delegating Method Accessor Impl. java: 43) \sim \cite{Continuous Method Accessor Impl.} available (Continuous Method Accessor Impl. java: 43) of the continuous Method Accessor Impl. java: 43) o
       java.lang.reflect.Method.invoke(Method.java:498) ~[?:1.8.0_171] at
       org. glass fish. jersey. server. model. internal. Resource Method Invocation Handler Factory \$1. invoke (Resource Method Invocation Handler Factory. java: \$1)
       [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
       org.glassfish.jersey.server.model.internal.AbstractJavaResourceMethodDispatcher$1.run(AbstractJavaResourceMethodDispatcher.java:144)
       [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
        org.glassfish.jersey.server.model.internal.AbstractJavaResourceMethodDispatcher.invoke(AbstractJavaResourceMethodDispatcher.java:161)
       [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
       org, glassfish.jersey.server.model.internal.JavaResourceMethodDispatcherProvider$VoidOutInvoker.doDispatch(JavaResourceMethodDispatcherProvider.java:143)
       [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
       org. glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher. dispatch (Abstract Java Resource Method Dispatcher. java: 99)\\
       [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.invoke(ResourceMethodInvoker.java:389)
```

```
[org.glassfish.jersey.core-jersey-server.2.25.jar:?] at org.glassfish.jersey.server.model.nternal.AbstractJavaResourceMethodDispatcher.dispatch(AbstractJavaResourceMethodDispatcher.java:99) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.invoke(ResourceMethodInvoker.java:349) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:347) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:347) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.2.5.jar:?] at org.glassfish.jersey.server.2.5.jar:?] at org.glassfish.jersey.internal.Errors$1.call(Errors.java:271) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at org.glassfish.jersey.internal.Errors.process(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at org.glassfish.jersey.internal.Errors.process(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at org.glassfish.jersey.internal.Errors.process(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at org.glassfish.jersey.process.internal.RequestScope.runInScope(RequestScope.java:317) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at org.glassfish.jersey.server.ServerRuntime.process(ServerRuntime.java:305) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.servlet.WebComponent.serviceImpl(WebComponent.java:473) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at org.glassfish.jersey.servlet.WebComponent.service(WebComponent.java:341) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:341) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at org.glassfish.jersey.servlet.ServletContainer.service(Serv
```

```
org. eclipse. jetty. servlet. Servlet Holder. handle (Servlet Holder. java: 845) \\ [org. eclipse. jetty-jetty-servlet-9.3.11. v20160721. jar: 9.3.11. v20160721] \\ [atthebre extended the property of the pr
         org.eclipse.jetty.servlet.ServletHandler\\ \$CachedChain.doFilter\\ (ServletHandler.java:1689) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
         at org.apache.pulsar.broker.web.ResponseHandlerFilter.doFilter(ResponseHandlerFilter.java:53) [org.apache.pulsar-pulsar-broker-2.2.0.jar:2.2.0] at
         org,eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1676) [org,eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
         at org.apache.pulsar.broker.web.AuthenticationFilter.doFilter.duthenticationFilter.java:74) [org.apache.pulsar-pulsar-broker-common-2.2.0.jar:2.2.0] at
         org.eclipse.jetty.servlet.ServletHandler\\ \$CachedChain.doFilter\\ (ServletHandler.java:1676) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
         at org.eclipse.jetty.servlet.ServletHandler.doHandle(ServletHandler.java:581) [org.eclipse.jetty-jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
         org.eclipse.jetty.server.session.SessionHandler.doHandle(SessionHandler.java:224) [org.eclipse.jetty-jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
         org.eclipse.jetty.server.handler.ContextHandler.doHandle(ContextHandler.java:1180) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
         org. eclipse. jetty. servlet. Servlet Handler. doScope (Servlet Handler. java: 511) \\ [org. eclipse. jetty-jetty-servlet-9.3.11.v20160721. jar: 9.3.11.v20160721] \\ at the first of the following the properties of the properties
         org.eclipse.jetty.server.session.SessionHandler.doScope(SessionHandler.java:185) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
         org.eclipse.jetty.server.handler.ContextHandler.doScope(ContextHandler.java:1112) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
         org. eclipse. jetty. server. handler. Scoped Handler. handle (Scoped Handler. java: 141) \\ [org. eclipse. jetty-jetty-server-9.3. 11. v 20160721. jar: 9.3. 11. v 20160721] \\ at the property of the propert
         org.eclipse.jetty.server.handler.Context Handler Collection.handler (Context Handler Collection.java: 213) \ [org.eclipse.jetty-jetty-server-handler.Context Handler.Context Handler.Context
         9.3.11.v20160721.jar: 9.3.11.v20160721]\ at\ org. eclipse.jetty.server. handler. Handler Collection. handle (Handler Collection.java: 119)\ [org. eclipse.jetty-jetty-server. handler. Handler
         9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerWrapper.handle(HandlerWrapper.java:134) [org.eclipse.jetty-jetty-server-
         9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.Server.handle(Server.java:524) [org.eclipse.jetty-jetty-server-
         9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpChannel.handle(HttpChannel.java:319) [org.eclipse.jetty-jetty-server-
         9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpConnection.onFillable(HttpConnection.java:253) [org.eclipse.jetty-jetty-server-
         9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.java:273]
         jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jetty-io-
         9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.jo.ssl.SslConnection.onFillable(SslConnection.java:202) [org.eclipse.jetty-jetty-jo-
         9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConn
         jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jo-
         9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.SelectChannelEndPoint$2.run(SelectChannelEndPoint.java:93) [org.eclipse.jetty-jetty-io-
         9.3.11.v20160721.jar:9.3.11.v20160721] at
         org.eclipse.jetty.util.thread.strategy. Execute Produce Consume.execute Produce Consume (Execute Produce Consume.java: 303) \\ [org.apache.pulsar-functions-consume] 
         metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume,produceConsume(ExecuteProduceConsume.java:148) [org.apache.pulsar-
         pulsar-functions-metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.run(ExecuteProduceConsume.java:136) [org.apache.pulsar-
         pulsar-functions-metrics-2.2.0.jar:?] at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1149) [?:1.8.0_171] at
         java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:624) [?:1.8.0_171] at
         io. netty. util. concurrent. Fast Thread Local Runnable. run (Fast Thread Local Runnable. java: 30) \\ [io. netty-netty-all-4.1.22. Final. jar: 4.1.22. Final. jar: 4
         java.lang.Thread.run(Thread.java:748) [?:1.8.0_171] 12:27:31.669 [pulsar-web-53-27] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 -
         [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t6%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-"
         "Python/3.7 aiohttp/3.4.2" 385 12:27:31.669 [pulsar-web-53-31] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t7%5Cmeta/permissions/testrole HTTP/1.1" 500 5652 "-" "Python/3.7 aiohttp/3.4.2" 402 12:27:31.668
         [pulsar-web-53-29] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST
         https://localhost:8081/admin/v2/persistent/tt1/testns1/t8%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 371 12:27:31.643
         [pulsar-web-53-28] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST
         https://localhost:8081/admin/v2/persistent/tt1/testns1/t5%5Cmeta/permissions/testrole HTTP/1.1" 204 0 "-" "Python/3.7 aiohttp/3.4.2" 173 12:27:31.642 [pulsar-
         web-53-24] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST
         https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 341
7. title: Setting topic permission under load
         body: #### Expected behavior Do a REST call to admin interface for setting topic permissions like:
         https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole body: {'testrole': ['consume', 'produce']} Should work every time and return
         status 204. #### Actual behavior When this is done with heavy load setting up permission for many topics in parallel. Some will result in the below logged
         exception and status code 500. #### Steps to reproduce Set up tenant and namespace, then run the set permission for many different topics in that namespace in parallel. I use the same role and actions for all of them. #### System configuration pulsar: 2.2.0 This error was when running the broker in standalone mode in a
         docker container supplied on docker hub, with authorisation and authentication via client certs. Have not tested on our full pulsar setup yet. #### Logs
          12:27:31.613 [pulsar-web-53-28] INFO org.apache.pulsar.broker.admin.impl.PersistentTopicsBase - [superUser] Successfully granted access for role testrole:
         [produce, consume] - topic persistent://tt1/testns1/t5\meta 12:27:31.587 [pulsar-web-53-30] ERROR org.apache.pulsar.broker.admin.impl.PersistentTopicsBase -
         [superUser] Failed to grant permissions for topic persistent://tt1/testns1/t0\data org.apache.zookeeper.KeeperException$BadVersionException: KeeperErrorCode
         = BadVersion for /admin/policies/tt1/testns1 at org.apache.zookeeper.KeeperException.create(KeeperException.java:118) ~[org.apache.pulsar-pulsar-zookeeper-KeeperException.create(KeeperException.java:118) ~[org.apache.pulsar-pulsar-zookeeper-KeeperException.create(KeeperException.java:118) ~[org.apache.pulsar-pulsar-zookeeper-KeeperException.create(KeeperException.java:118) ~[org.apache.pulsar-pulsar-zookeeper-KeeperException.create(KeeperException.java:118) ~[org.apache.pulsar-zookeeper-KeeperException.create(KeeperException.java:118) ~[org.apache.pulsar-zookeeper-KeeperException.create(KeeperException.java:118) ~[org.apache.pulsar-zookeeper-KeeperException.create(KeeperException.java:118) ~[org.apache.pulsar-zookeeper-KeeperException.create(KeeperException.java:118) ~[org.apache.pulsar-zookeeper-KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.create(KeeperException.cre
         2.2.0.jar:2.2.0] at org.apache.zookeeper.KeeperException.create(KeeperException.java:54) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at
         org.apache.zookeeper.ZooKeeper.setData(ZooKeeper.java:1336) \sim [org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] \ at org.apache.bookkeeper.ZooKeeper.ZooKeeper.Client.access \$3101(ZooKeeper.Client.java:70) \sim [org.apache.bookkeeper-bookkeeper-4.7.2.jar:4.7.2] \ at org.apache.bookkeeper.ZooKeeper.Client.access \$3101(ZooKeeper.Client.java:70) \sim [org.apache.bookkeeper-bookkeeper-4.7.2.jar:4.7.2] \ at org.apache.bookkeeper.ZooKeeper.Client.access \$3101(ZooKeeper.Client.java:70) \sim [org.apache.bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper
         org.apache.bookkeeper.ZooKeeperClient\$21.call(ZooKeeperClient.java:1065) \\ \sim [org.apache.bookkeeper-bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at the contract of the con
         org.apache.bookkeeper.zookeeper.ZooKeeperClient$21.call(ZooKeeperClient.java:1059) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
         org.apache.bookkeeper.zookeeper.ZooWorker.syncCallWithRetries(ZooWorker.java:140) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
         org.apache.bookkeeper.zookeeper.ZooKeeperClient.setData(ZooKeeperClient.java:1059) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
         org. apache. pulsar. broker. admin. impl. Persistent Topics Base. internal Grant Permissions On Topic (Persistent Topics Base. java: 274) \\ [org. apache. pulsar-proker-pulsar. broker-pulsar. broker-p
         2.2.0.jar:2.2.0] at org.apache.pulsar.broker.admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-pulsar-broker-
         2.2.0.jar:2.2.0] at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method) ~[?:1.8.0_171] at
         sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62) ~[?:1.8.0_171] at
         sun.reflect. Delegating Method Accessor Impl. invoke (Delegating Method Accessor Impl. java: 43) \sim \cite{Continuous Method} (Polegating Method Accessor Impl. java: 43) \sim \cite{Continuous Method Accessor Impl. java: 43)} \sim \c
         java.lang.reflect.Method.invoke(Method.java:498) ~[?:1.8.0_171] at
         org, glass fish, jersey. server. model. internal. Resource Method Invocation Handler Factory \$1. invoke (Resource Method Invocation Handler Factory, java: \$1)
         [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
         org, glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher $1. run (Abstract Java Resource Method Dispatcher. java: 144)
         [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
         org. glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher. invoke (Abstract Java Resource Method Dispatcher. java: 161) and the property of the property of
         [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
         org. gl\"{ass} fish. j\'{e}rsey\'. server\'. mod\'el. internal. Jav\'a Resource Method Dispatcher Provider. SVoid Out Invoker. do Dispatch (Java Resource Method Dispatcher Provider. java: 143)
         [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
         org. glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher. dispatch (Abstract Java Resource Method Dispatcher. java: 99)\\
         [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.invoke(ResourceMethodInvoker.java:389)
         [org. glassfish.jersey.core-jersey-server-2.25.jar:?] at org. glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:347)
         [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:102)
         [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.ServerRuntime$2.run(ServerRuntime.java:326) [org.glassfish.jersey.core-jersey-server.2.5.jar:?] at org.glassfish.jersey.server.ServerRuntime$2.run(ServerRuntime.java:326) [org.glassfish.jersey.core-jersey-server.2.5.jar:?] at org.glassfish.jersey.server.ServerRuntime$2.run(ServerRuntime.java:326) [org.glassfish.jersey.core-jersey-server.2.5.jar:?] at org.glassfish.jersey.server.ServerRuntime$2.run(ServerRuntime.java:326) [org.glassfish.jersey.core-jersey-server.2.5.jar:?] at org.glassfish.jersey.server.ServerRuntime$2.run(ServerRuntime.java:326) [org.glassfish.jersey.server.2.5.jar:?] at org.glassfish.jersey.server.ServerRuntime$2.run(ServerRuntime.java:326) [org.glassfish.jersey.server.2.5.jar:?] at org.glassfish.jersey.server.ServerRuntime$2.run(ServerRuntime.java:326) [org.glassfish.jersey.server.2.5.jar:?] at org.glassfish.jersey.server.ServerRuntime$3.run(ServerRuntime.java:326) [org.glassfish.jersey.server.2.5.jar:?] at org.glassfish.jersey.server.ServerRuntime$3.run(ServerRuntime.java:326) [org.glassfish.jersey.server.2.5.jar:?] at org.glassfish.jersey.server.ServerRuntime$3.run(ServerRuntime.java:326) [org.glassfish.jersey.server.2.5.jar:?] at org.glassfish.jersey.server.ServerRuntime.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.S
         server-2.25.jar:?] at org.glassfish.jersey.internal.Errors$1.call(Errors.java:271) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
         org.glass fish.jersey.internal. Errors \$1. call (Errors.java: 267) \ [org.glass fish.jersey.core-jersey-common-2.25.jar:?] \ at the substitution of the substitution
         org.glassfish.jersey.internal.Errors.process(Errors.java:315) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
         org. glass fish. jersey. internal. Errors. process (Errors. java: 297) \ [org. glass fish. jersey. core-jersey-common-2.25. jar:?] \ at the process of the
         org.glassfish.jersey.internal.Errors.process(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
         org.glassfish.jersey.process.internal.RequestScope.runInScope(RequestScope.java:317) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
```

org.glassfish.jersey.server.ServerRuntime.process(ServerRuntime.java:305) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.ApplicationHandler.handle(ApplicationHandler.java:1154) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at

```
org. glass fish. jersey. servlet. Web Component. service Impl (Web Component. java: 473) \ [org. glass fish. jersey. containers-jersey-container-servlet-core-2.25. jar:?] \ at the container of the container o
         org. glass fish. jersey. servlet. Web Component. jersey. container s-jersey-container s
         org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:388) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
         org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:341) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
         org. glass fish. jersey. servlet. Servlet Container. service (Servlet Container. java: 228) \\ [org. glass fish. jersey. containers-jersey-container-servlet-core-2.25. jar:?] \\ at the proposition of the
         org.eclipse.jetty.servlet.ServletHolder.handle(ServletHolder.java:845) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
         org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1689) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
         at org.apache.pulsar.broker.web.ResponseHandlerFilter.doFilter(ResponseHandlerFilter.java:53) [org.apache.pulsar-pulsar-broker-2.2.0.jar:2.2.0] at
         org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1676) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
         at org.apache.pulsar.broker.web.AuthenticationFilter.doFilter.duthenticationFilter.java:74) [org.apache.pulsar-pulsar-broker-common-2.2.0.jar:2.2.0] at
         org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1676) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
         at org.eclipse.jetty.servlet.ServletHandler.doHandle(ServletHandler.java:581) [org.eclipse.jetty-jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
         org.eclipse.jetty.server.session.SessionHandler.doHandle(SessionHandler.java:224) [org.eclipse.jetty-jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
         org.eclipse.jetty.server.handler.Context Handler.do Handle (Context Handler.java: 1180) \ [org.eclipse.jetty-server-9.3.11.v20160721.jar: 9.3.11.v20160721] \ at the server of the ser
         org.eclipse.jetty.servlet.ServletHandler.doScope(ServletHandler.java:511) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
         org.eclipse.jetty.server.session.SessionHandler.doScope(SessionHandler.java:185) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
         org.eclipse.jetty.server.handler.ContextHandler.doScope(ContextHandler.java:1112) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
         org.eclipse.jetty.server.handler.ScopedHandler.handle(ScopedHandler.java:141) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
         org. eclipse.jetty. server. handler. Context Handler Collection. handle (Context Handler Collection. java: 213) \ [org. eclipse.jetty-jetty-server. handler. Context Handler Collection. handle (Context Handler Collection. java: 213) \ [org. eclipse.jetty-jetty-server. handler. Context Handler Collection. handle (Context Handler Collection. java: 213) \ [org. eclipse.jetty-jetty-server. handler. Context Handler Collection. handle (Context Handler Collection. java: 213) \ [org. eclipse.jetty-jetty-server. handler. Context Handler Collection. handle (Context Handler Collection. java: 213) \ [org. eclipse.jetty-jetty-server. handler. Context Handler Collection. handle (Context Handler Collection. java: 213) \ [org. eclipse.jetty-jetty-server. handler. Context Handler Collection. handle (Context Handler Collection. java: 213) \ [org. eclipse.jetty-jetty-server. handler. Context Handler Collection. handle (Context Handler Collection. java: 213) \ [org. eclipse.jetty-jetty-jetty-server. handler. Context Handler Collection. handle (Context Handler Collection. java: 213) \ [org. eclipse.jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-je
         9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerCollection.handle(HandlerCollection.java:119) [org.eclipse.jetty-jetty-server-
         9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerWrapper.handle(HandlerWrapper.java:134) [org.eclipse.jetty-jetty-server-
         9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.Server.handle(Server.java:524) [org.eclipse.jetty-jetty-server-
         9.3.11.v20160721.jar: 9.3.11.v20160721]\ at\ org. eclipse.jetty.server. Http Channel.handle (Http Channel.java: 319)\ [org. eclipse.jetty-jetty-server-left org. eclipse.jetty-server-left org. eclipse.jetty-server-left org. eclipse.
         9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpConnection.onFillable(HttpConnection.java:253) [org.eclipse.jetty-jetty-server-
         9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-
         jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jetty-io-
         9.3.11.v20160721.jar: 9.3.11.v20160721]\ at\ org. eclipse.jetty.io.ssl. SslConnection. on Fillable (SslConnection.java: 202)\ [org.eclipse.jetty-jetty-io-ssl. SslConnection.]\ available (SslConnection.java: 202)\ [org.eclipse.jetty-jetty-jetty-io-ssl. SslConnection.]\ available (SslConnection.java: 202)\ [org.eclipse.jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jet
         9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.gova:273]
         jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jetty-io-
         9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.SelectChannelEndPoint$2.run(SelectChannelEndPoint.java:93) [org.eclipse.jetty-jetty-jo-
         9.3.11.v20160721.jar:9.3.11.v20160721] at
         org.eclipse.jetty.util.thread.strategy. Execute Produce Consume.execute Produce Consume (Execute Produce Consume.java: 303) \\ [org.apache.pulsar-functions-consume] 
         metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.produceConsume(ExecuteProduceConsume.java:148) [org.apache.pulsar-
         pulsar-functions-metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.run(ExecuteProduceConsume.java:136) [org.apache.pulsar-
         pulsar-functions-metrics-2.2.0.jar:?] at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1149) [?:1.8.0_171] at
         java.util.concurrent. Thread Pool Executor \$Worker.run (Thread Pool Executor.java: 624)~\cite{Concurrent} at the property of the property of
         io.netty.util.concurrent.FastThreadLocalRunnable.run(FastThreadLocalRunnable.java:30) [io.netty-netty-all-4.1.22.Final.jar:4.1.22.Final] at
         java.lang.Thread.run(Thread.java:748) [?:1.8.0_171] 12:27:31.669 [pulsar-web-53-27] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 -
         [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t6%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-"
         "Python/3.7 aiohttp/3.4.2" 385 12:27:31.669 [pulsar-web-53-31] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t7%5Cmeta/permissions/testrole HTTP/1.1" 500 5652 "-" "Python/3.7 aiohttp/3.4.2" 402 12:27:31.668
         [pulsar-web-53-29] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t8%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 371 12:27:31.643
         [pulsar-web-53-28]\ INFO\ org.eclipse.jetty.server. RequestLog-172.17.0.1--[07/Nov/2018:12:27:31+0000]\ "POST and the content of the conten
         https://localhost:8081/admin/v2/persistent/tt1/testns1/t5%5Cmeta/permissions/testrole HTTP/1.1" 204 0 "-" "Python/3.7 aiohttp/3.4.2" 173 12:27:31.642 [pulsar-
         web-53-24] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST
         https://localhost:8081/admin/v2/persistent/t1/testns1/t4%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 341
8. title: Setting topic permission under load
         body: #### Expected behavior Do a REST call to admin interface for setting topic permissions like:
         https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole body: {'testrole': ['consume', 'produce']} Should work every time and return
         status 204. #### Actual behavior When this is done with heavy load setting up permission for many topics in parallel. Some will result in the below logged
         exception and status code 500. #### Steps to reproduce Set up tenant and namespace, then run the set permission for many different topics in that namespace in
         parallel. I use the same role and actions for all of them. #### System configuration pulsar: 2.2.0 This error was when running the broker in standalone mode in a
         docker container supplied on docker hub, with authorisation and authentication via client certs. Have not tested on our full pulsar setup yet. #### Logs
         12:27:31.613 [pulsar-web-53-28] INFO org.apache.pulsar.broker.admin.impl.PersistentTopicsBase - [superUser] Successfully granted access for role testrole:
         [produce, consume] - topic persistent://tt1/testns1/t5\meta 12:27:31.587 [pulsar-web-53-30] ERROR org.apache.pulsar.broker.admin.impl.PersistentTopicsBase
         [superUser] Failed to grant permissions for topic persistent://tt1/testns1/t0\data org.apache.zookeeper.KeeperException$BadVersionException: KeeperErrorCode
              BadVersion for /admin/policies/tt1/testns1 at org.apache.zookeeper.KeeperException.create(KeeperException.java:118) ~[org.apache.pulsar-pulsar-zookeeper-
         2.2.0.jar:2.2.0] at org.apache.zookeeper.KeeperException.create(KeeperException.java:54) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at
         org.apache.zookeeper.ZooKeeper.set Data (ZooKeeper.java:1336) \sim [org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] \ at the contemporary of th
         org. apache. bookkeeper. ZooKeeper Client. access \$3101 (ZooKeeper Client. java: 70) \sim [org. apache. bookkeeper-bookkeeper-bookkeeper-server-4.7.2. jar: 4.7.2] \ at the sum of the property of the property
         org.apache.bookkeeper.ZooKeeperClient\$21.call(ZooKeeperClient.java:1065) \sim [org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] \ at the contract of th
         org.apache.bookkeeper.zookeeper.ZooKeeperClient$21.call(ZooKeeperClient.java:1059) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
         org.apache.bookkeeper.zookeeper.zooworker.syncCallWithRetries(ZooWorker.java:140) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
         org.apache.bookkeeper.zookeeper.Zient.setData(ZooKeeperClient.java:1059) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
         org.apache.pulsar.broker.admin.impl.PersistentTopicsBase.internalGrantPermissionsOnTopic(PersistentTopicsBase.java:274) [org.apache.pulsar-proker-pulsar-broker-pulsar-broker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-proker-pulsar-pulsar-proker-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pulsar-pul
         2.2.0. jar:2.2.0] at org.apache.pulsar.broker.admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107)]
         2.2.0.jar:2.2.0] at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method) ~[?:1.8.0 171] at
         sun.reflect. Native Method Accessor Impl. invoke (Native Method Accessor Impl. java: 62) \sim \cite{Continuous} \sim \cite{Continu
         sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43) ~[?:1.8.0_171] at
         java.lang.reflect.Method.invoke(Method.java:498) ~[?:1.8.0_171] at
         org, glassfish. jersey. server. model. internal. Resource Method Invocation Handler Factory, $1. invoke (Resource Method Invocation Handler Factory, java: 81)
         [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
         org. glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher \$1. run (Abstract Java Resource Method Dispatcher. java: 144)
         [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
         org.glassfish.jersey.server.model.internal.AbstractJavaResourceMethodDispatcher.invoke(AbstractJavaResourceMethodDispatcher.java:161)
         [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
         org. glass fish. jersey. server. model. internal. Java Resource Method Dispatcher Provider \$Void Out Invoker. do Dispatch (Java Resource Method Dispatcher Provider. java: 143)
         [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
         org.glassfish.jersey.server.model.internal.AbstractJavaResourceMethodDispatcher.dispatch(AbstractJavaResourceMethodDispatcher.java:99)
         [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.invoke(ResourceMethodInvoker.java:389)
          [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:347)
```

[org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:102) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.ServerRuntime\$2.run(ServerRuntime.java:326) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.ServerRuntime\$2.run(ServerRuntime.java:326) [org.glassfish.jersey.core-jersey-server-2.25.jar:?]

server-2.25.jar:?] at org.glassfish.jersey.internal.Errors\$1.call(Errors.java:271) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at

org.glassfish.jersey.internal.Errors\$1.call(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at org.glassfish.jersey.internal.Errors.process(Errors.java:315) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at

```
org.glass fish.jersey.internal. Errors.process (Errors.java: 297) \ [org.glass fish.jersey.core-jersey-common-2.25.jar:?] \ at the process of the process 
      org.glassfish.jersey.internal.Errors.process(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
      org.glassfish.jersey.process.internal.RequestScope.runInScope(RequestScope.java:317) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
      org.glassfish.jersey.server.ServerRuntime.process(ServerRuntime.java:305) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
      org.glassfish.jersey.server.ApplicationHandler.handle(ApplicationHandler.java:1154) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
      org.glassfish.jersey.servlet.WebComponent.serviceImpl(WebComponent.java:473) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
      org.glassfish.jersey.servlet.WebComponent.service(WebComponent.java:427) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
      org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:388) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
      org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:341) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
      org. glass fish. jersey. servlet. Servlet Container. servlet (Servlet Container. java: 228) \ [org. glass fish. jersey. containers-jersey-container-servlet-core-2.25. jar:?] \ at the container of the containe
      org.eclipse.jetty.servlet.ServletHolder.handle(ServletHolder.java:845) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
      org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1689) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
      at org.apache.pulsar.broker.web.ResponseHandlerFilter.doFilter(ResponseHandlerFilter.java:53) [org.apache.pulsar-pulsar-broker-2.2.0.jar:2.2.0] at
      org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1676) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
      at org.apache.pulsar.broker.web.AuthenticationFilter.doFilter(AuthenticationFilter.java:74) [org.apache.pulsar-pulsar-broker-common-2.2.0.jar:2.2.0] at
      org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1676) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
      at org.eclipse.jetty.servlet.ServletHandler.doHandle(ServletHandler.java:581) [org.eclipse.jetty-jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
      org.eclipse.jetty.server.session.SessionHandler.doHandle(SessionHandler.java:224) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
      org.eclipse.jetty.server.handler.ContextHandler.doHandle(ContextHandler.java:1180) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
      org.eclipse.jetty.servlet.ServletHandler.doScope(ServletHandler.java:511) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
      org.eclipse.jetty.server.session.SessionHandler.doScope(SessionHandler.java:185) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
      org.eclipse.jetty.server.handler.ContextHandler.doScope(ContextHandler.java:1112) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
      org.eclipse.jetty.server.handler.ScopedHandler.handle(ScopedHandler.java:141) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
      org.eclipse.jetty.server.handler.ContextHandlerCollection.handle(ContextHandlerCollection.java:213) [org.eclipse.jetty-jetty-server.handler.ContextHandlerCollection.java:213)
      9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerCollection.handle(HandlerCollection.java:119) [org.eclipse.jetty-jetty-server-
      9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerWrapper.handle(HandlerWrapper.java:134) [org.eclipse.jetty-jetty-server-
      9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.Server.handle(Server.java:524) [org.eclipse.jetty-jetty-server-
      9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpChannel.handle(HttpChannel.java:319) [org.eclipse.jetty-jetty-server-
      9.3.11.v20160721, jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpConnection.onFillable(HttpConnection.java:253) [org.eclipse.jetty-jetty-server-
      9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.java:273]
      jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jetty-io-
      9.3.11.v20160721.jar: 9.3.11.v20160721]\ at\ org. eclipse.jetty.io.ssl. SslConnection. on Fillable (SslConnection.java: 202)\ [org.eclipse.jetty-jetty-io-split]\ at\ org. eclipse.jetty-jetty-io-split]\ at\ org. eclipse.jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-jetty-j
      9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-
     jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jety-jo-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.SelectChannelEndPoint$2.run(SelectChannelEndPoint.java:93) [org.eclipse.jetty-jetty-jo-
      9.3.11.v20160721.jar:9.3.11.v20160721] at
      org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.executeProduceConsume(ExecuteProduceConsume.java:303) [org.apache.pulsar-functions-
      metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume,produceConsume(ExecuteProduceConsume,java:148) [org.apache.pulsar-
      pulsar-functions-metrics-2.2.0.jar.'?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.run(ExecuteProduceConsume.java:136) [org.apache.pulsar-
      pulsar-functions-metrics-2.2.0.jar:?] at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1149) [?:1.8.0_171] at
      java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:624) [?:1.8.0_171] at
      io.netty.util.concurrent.FastThreadLocalRunnable.run(FastThreadLocalRunnable.java:30) [io.netty-netty-all-4.1.22.Final.jar:4.1.22.Final] at
      java.lang.Thread.run(Thread.java:748) [?:1.8.0_171] 12:27:31.669 [pulsar-web-53-27] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 -
      [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t6%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-"
      "Python/3.7 aiohttp/3.4.2" 385 12:27:31.669 [pulsar-web-53-31] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t7%5Cmeta/permissions/testrole HTTP/1.1" 500 5652 "-" "Python/3.7 aiohttp/3.4.2" 402 12:27:31.668
     [pulsar-web-53-29] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t8%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 371 12:27:31.643
      [pulsar-web-53-28] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST"
      https://localhost:8081/admin/v2/persistent/tt1/testns1/t5%5Cmeta/permissions/testrole HTTP/1.1" 204 0 "-" "Python/3.7 aiohttp/3.4.2" 173 12:27:31.642 [pulsar-
      web-53-24] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 341
9. title: Setting topic permission under load
      body: #### Expected behavior Do a REST call to admin interface for setting topic permissions like:
      https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole body: {'testrole': ['consume', 'produce']} Should work every time and return
      status 204. #### Actual behavior When this is done with heavy load setting up permission for many topics in parallel. Some will result in the below logged
      exception and status code 500. #### Steps to reproduce Set up tenant and namespace, then run the set permission for many different topics in that namespace in
      parallel. I use the same role and actions for all of them. #### System configuration pulsar: 2.2.0 This error was when running the broker in standalone mode in a
      docker container supplied on docker hub, with authorisation and authentication via client certs. Have not tested on our full pulsar setup yet. #### Logs
      12:27:31.613 [pulsar-web-53-28] INFO org.apache.pulsar.broker.admin.impl.PersistentTopicsBase - [superUser] Successfully granted access for role testrole: [produce, consume] - topic persistent://tt1/testns1/t5\meta 12:27:31.587 [pulsar-web-53-30] ERROR org.apache.pulsar.broker.admin.impl.PersistentTopicsBase -
      [superUser] Failed to grant permissions for topic persistent://tt1/testns1/t0\data org.apache.zookeeper.KeeperException$BadVersionException: KeeperErrorCode
      = BadVersion for /admin/policies/tt1/testns1 at org.apache.zookeeper.KeeperException.create(KeeperException.java:118) ~[org.apache.pulsar-pulsar-zookeeper-
      2.2.0.jar:2.2.0] at org.apache.zookeeper.KeeperException.create(KeeperException.java:54) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at
      org.apache.zookeeper.ZooKeeper.setData (ZooKeeper.java:1336) \sim [org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] \ at the contemporary of the
      org. a pache. bookkeeper. ZooKeeper. ZooKeeper. ZooKeeper. ZooKeeper. Since a pache. bookkeeper. SooKeeper. Since a pache. bookkeeper. SooKeeper. SooKee
      org.apache.bookkeeper.zookeeper.ZooKeeperClient$21.call(ZooKeeperClient.java:1065) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
      org.apache.bookkeeper.zookeeper.ZooKeeperClient$21.call(ZooKeeperClient.java:1059) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
      org.apache.bookkeeper.zookeeper.ZooWorker.syncCallWithRetries(ZooWorker.java:140) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
      org.apache.bookkeeper.ZooKeeperClient.setData(ZooKeeperClient.java:1059) \sim [org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] \ at the contract of th
      org.apache.pulsar.broker.admin.impl.PersistentTopicsBase.internalGrantPermissionsOnTopic(PersistentTopicsBase.java:274) [org.apache.pulsar-broker-
      2.2.0.jar:2.2.0] at org.apache.pulsar.broker.admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.gran
      2.2.0.jar:2.2.0] at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method) ~[?:1.8.0_171] at
      sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62) ~[?:1.8.0_171] at
      sun.reflect. Delegating Method Accessor Impl. invoke (Delegating Method Accessor Impl. java: 43) \sim \cite{Continuous Method} (Polegating Method Accessor Impl. java: 43) \sim \cite{Continuous Method Accessor Impl. java: 43)} \sim \c
     java.lang.reflect.Method.invoke(Method.java:498) ~[?:1.8.0_171] at org.glassfish.jersey.server.model.internal.ResourceMethodInvocationHandlerFactory$1.invoke(ResourceMethodInvocationHandlerFactory.java:81)
      [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
      org. glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher \$1. run (Abstract Java Resource Method Dispatcher. java: 144)
      [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
      org.glassfish.jersey.server.model.internal.AbstractJavaResourceMethodDispatcher.invoke(AbstractJavaResourceMethodDispatcher.java:161)
      [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
      org.glassfish.jersey.server.model.internal.JavaResourceMethodDispatcherProvider$VoidOutInvoker.doDispatch(JavaResourceMethodDispatcherProvider.java:143)
      [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
      org.glassfish.jersey.server.model.internal.AbstractJavaResourceMethodDispatcher.dispatch(AbstractJavaResourceMethodDispatcher.java:99)
```

[org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.invoke(ResourceMethodInvoker.java:389) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:347)

```
[org. glass fish. jersey. core-jersey-server-2.25. jar:?] \ at org. glass fish. jersey. server. model. Resource Method Invoker. apply (Resource Method Invoker. java: 102) \ and the properties of the propertie
[org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.ServerRuntime$2.run(ServerRuntime.java:326) [org.glassfish.jersey.core-jersey-server.2.5]
server-2.25.jar:?] at org.glassfish.jersey.internal.Errors$1.call(Errors.java:271) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
org.glassfish.jersey.internal.Errors$1.call(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
org.glassfish.jersey.internal.Errors.process(Errors.java:315) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
org.glassfish.jersey.internal.Errors.process(Errors.java:297) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
org.glassfish.jersey.internal.Errors.process(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
org.glassfish.jersey.process.internal.RequestScope.runInScope(RequestScope.java:317) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
org.glassfish.jersey.server.ServerRuntime.process(ServerRuntime.java:305) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
org.glassfish.jersey.server.ApplicationHandler.handle(ApplicationHandler.java:1154) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
org.glassfish.jersey.servlet.WebComponent.serviceImpl(WebComponent.java:473) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
org.glassfish.jersey.servlet.WebComponent.service(WebComponent.java:427) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
org. glass fish. jersey. servlet. Servlet Container. servlet (Servlet Container. java: 388) \ [org. glass fish. jersey. containers-jersey-container-servlet-core-2.25. jar:?] \ at the container of the containe
org. glass fish. jersey. servlet. Servlet Container. servlet (Servlet Container. java: 341) \ [org. glass fish. jersey. containers-jersey-container-servlet-core-2.25. jar:?] \ at the container of the containe
org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:228) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
org.eclipse.jetty.servlet.ServletHolder.handle(ServletHolder.java:845) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1689) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
at org.apache.pulsar.broker.web.ResponseHandlerFilter.doFilter(ResponseHandlerFilter.java:53) [org.apache.pulsar-pulsar-broker-2.2.0.jar:2.2.0] at
org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1676) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
at org.apache.pulsar.broker.web.AuthenticationFilter.doFilter.duthenticationFilter.java:74) [org.apache.pulsar-pulsar-broker-common-2.2.0.jar:2.2.0] at
org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1676) [org.eclipse.jetty-jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
at org.eclipse.jetty.servlet.ServletHandler.doHandle(ServletHandler.java:581) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
org.eclipse.jetty.server.session.SessionHandler.doHandle(SessionHandler.java:224) [org.eclipse.jetty-jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
org.eclipse.jetty.server.handler.ContextHandler.doHandle(ContextHandler.java:1180) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
org.eclipse.jetty.servlet.ServletHandler.doScope(ServletHandler.java:511) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
org.eclipse.jetty.server.session.SessionHandler.doScope(SessionHandler.java:185) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
org.eclipse.jetty.server.handler.ContextHandler.doScope(ContextHandler.java:1112) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
org.eclipse.jetty.server.handler.ScopedHandler.handle(ScopedHandler.java:141) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
org.eclipse.jetty.server.handler.ContextHandlerCollection.handle(ContextHandlerCollection.java:213) [org.eclipse.jetty-jetty-server-
9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerCollection.handle(HandlerCollection.java:119) [org.eclipse.jetty-jetty-server-
9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerWrapper.handle(HandlerWrapper.java:134) [org.eclipse.jetty-jetty-server-
9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.Server.handle(Server.java:524) [org.eclipse.jetty-jetty-server.
9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpChannel.handle(HttpChannel.java:319) [org.eclipse.jetty-jetty-server-
9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpConnection.onFillable(HttpConnection.java:253) [org.eclipse.jetty-jetty-server-
9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.java:273]
jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jetty-io-
9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.jo.ssl.SslConnection.onFillable(SslConnection.java:202) [org.eclipse.jetty-jetty-jo-
9.3.11.v20160721,jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.java:273)
jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jetty-io-
9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.SelectChannelEndPoint$2.run(SelectChannelEndPoint.java:93) [org.eclipse.jetty-jetty-io-
9.3.11.v20160721.jar:9.3.11.v20160721] at
org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.executeProduceConsume(ExecuteProduceConsume.java:303) [org.apache.pulsar-functions-
metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.produceConsume(ExecuteProduceConsume.java:148) [org.apache.pulsar-
pulsar-functions-metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.run(ExecuteProduceConsume.java:136) [org.apache.pulsar-functions-metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.java:136) [org.apache.pulsar-functions-metrics-2.2.0.jar:] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.java:136) [org.apache.pulsar-functions-produceConsume.java:136) [org.apache.pulsar-functions-produceConsume.java:136] [org.apache.pulsar-functions-produceConsume.java:136] [org.
pulsar-functions-metrics-2.2.0.jar:?] at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1149) [?:1.8.0_171] at
java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:624) [?:1.8.0_171] at
io.netty.util.concurrent.FastThreadLocalRunnable.run(FastThreadLocalRunnable.java:30) [io.netty-netty-all-4.1.22.Final.jar:4.1.22.Final] at
java.lang.Thread.run(Thread.java:748) [?:1.8.0_171] 12:27:31.669 [pulsar-web-53-27] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - -
[07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t6%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-"
"Python/3.7 aiohttp/3.4.2" 385 12:27:31.669 [pulsar-web-53-31] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t7%5Cmeta/permissions/testrole HTTP/1.1" 500 5652 "-" "Python/3.7 aiohttp/3.4.2" 402 12:27:31.668
[pulsar-web-53-29] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t8%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 371 12:27:31.643
[pulsar-web-53-28] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST
https://localhost:8081/admin/v2/persistent/tt1/testns1/t5%5Cmeta/permissions/testrole HTTP/1.1" 204 0 "-" "Python/3.7 aiohttp/3.4.2" 173 12:27:31.642 [pulsar-
web-53-24] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 341
body: #### Expected behavior Do a REST call to admin interface for setting topic permissions like:
https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole body: {'testrole': ['consume', 'produce']} Should work every time and return
```

10. title: Setting topic permission under load

[org.glassfish.jersey.core-jersey-server-2.25.jar:?] at

status 204. #### Actual behavior When this is done with heavy load setting up permission for many topics in parallel. Some will result in the below logged exception and status code 500. #### Steps to reproduce Set up tenant and namespace, then run the set permission for many different topics in that namespace in parallel. I use the same role and actions for all of them. #### System configuration pulsar: 2.2.0 This error was when running the broker in standalone mode in a docker container supplied on docker hub, with authorisation and authentication via client certs. Have not tested on our full pulsar setup vet, #### Logs 12:27:31.613 [pulsar-web-53-28] INFO org.apache.pulsar.broker.admin.impl.PersistentTopicsBase - [superUser] Successfully granted access for role testrole: [produce, consume] - topic persistent://tt1/testns1/t5\meta 12:27:31.587 [pulsar-web-53-30] ERROR org.apache.pulsar.broker.admin.impl.PersistentTopicsBase -[superUser] Failed to grant permissions for topic persistent://tt1/testns1/t0\data org.apache.zookeeper.KeeperException\$BadVersionException: KeeperErrorCode = BadVersion for /admin/policies/tt1/testns1 at org.apache.zookeeper.KeeperException.create(KeeperException.java:118) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at org.apache.zookeeper.KeeperException.create(KeeperException.java:54) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at $org. a pache. zookee per. ZooKee per. set Data (ZooKee per. java: 1336) \\ \sim [org. a pache. pulsar-pulsar-zookee per-2.2.0. jar: 2.2.0] \\ \text{ at } 2.2.0 \text{ jar: 2.2.0} \\ \text{ at } 2.2.0 \text{$ $org.apache.bookkeeper.zookeeper.ZooKeeperClient.access\$3101(ZooKeeperClient.java:70) \sim [org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] \ at the sum of the contraction of th$ org.apache.bookkeeper.zookeeper.ZooKeeperClient\$21.call(ZooKeeperClient.java:1065) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at $org. apache. bookkee per. Zoo Keeper Client \$21. call (Zoo Keeper Client. java: 1059) \sim [org. apache. bookkee per-bookkee per-bookkee per-server-4.7.2. jar: 4.7.2] \ at the contraction of the contracti$ $org. apache. bookkeeper. Zoo Worker. sync Call With Retries (Zoo Worker. java: 140) \\ \sim [org. apache. bookkeeper-bookkeeper-bookkeeper-server-4.7.2. jar: 4.7.2] at the synchological properties of the properti$ $org. apache. bookkeeper. ZooKeeper Client. set Data (ZooKeeper Client. java: 1059) \sim [org. apache. bookkeeper-bookkeeper-server-4.7.2. jar: 4.7.2] \ at the contract of the$ org.apache.pulsar.broker.admin.impl.PersistentTopicsBase.internalGrantPermissionsOnTopic(PersistentTopicsBase.java:274) [org.apache.pulsar-pulsar-broker-2.2.0.jar:2.2.0] at org.apache.pulsar.broker.admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) 2.2.0.jar:2.2.0] at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method) ~[?:1.8.0_171] at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62) ~[?:1.8.0_171] at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43) ~[?:1.8.0_171] at java.lang.reflect.Method.invoke(Method.java:498) ~[?:1.8.0_171] at org.glassfish.jersey.server.model.internal.ResourceMethodInvocationHandlerFactory\$1.invoke(ResourceMethodInvocationHandlerFactory.java:81) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org, glass fish. jersey.server.model.internal.AbstractJavaResourceMethodDispatcher\$1.run(AbstractJavaResourceMethodDispatcher.java:144) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at

org. glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher. invoke (Abstract Java Resource Method Dispatcher. java: 161) and the property of the property of

```
org. glass fish. jersey. server. model. internal. Java Resource Method Dispatcher Provider \$Void Out Invoker. do Dispatch (Java Resource Method Dispatcher Provider. java: 143)
  [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
  org. glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher. dispatch (Abstract Java Resource Method Dispatcher. java: 99)\\
  [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.invoke(ResourceMethodInvoker.java:389)
   [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:347)
  [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:102)
  [org. glassfish.jersey.core-jersey-server-2.25.jar:?] at org. glassfish.jersey.server.ServerRuntime$2.run(ServerRuntime.java:326) [org. glassfish.jersey.core-jersey-server.
  server-2.25.jar:?] at org.glassfish.jersey.internal.Errors$1.call(Errors.java:271) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
  org.glassfish.jersey.internal.Errors$1.call(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
  org. glass fish. jersey. internal. Errors. process (Errors. java: 315) \ [org. glass fish. jersey. core-jersey-common-2.25. jar:?] \ at the process of the
  org.glassfish.jersey.internal.Errors.process(Errors.java:297) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
  org.glassfish.jersey.internal.Errors.process(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
  org. glass fish. jersey. process. internal. Request Scope. run In Scope (Request Scope. java: 317) \ [org. glass fish. jersey. core-jersey-common-2.25. jar:?] \ at the scope of the scop
  org.glassfish.jersey.server.ServerRuntime.process(ServerRuntime.java:305) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
  org.glassfish.jersey.server.ApplicationHandler.handle(ApplicationHandler.java:1154) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
  org.glassfish.jersey.servlet.WebComponent.serviceImpl(WebComponent.java:473) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
  org.glassfish.jersey.servlet.WebComponent.service(WebComponent.java:427) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
  org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:388) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
  org. glass fish. jersey. servlet. Servlet Container. service (Servlet Container. java: 341) \ [org. glass fish. jersey. containers-jersey-container-servlet-core-2.25. jar:?] \ at the properties of the propert
  org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:228) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
  org.eclipse.jetty.servlet.ServletHolder.handle(ServletHolder.java:845) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
  org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1689) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
  at\ org. apache. pulsar. broker. web. Response Handler Filter. (Response Handler Filter. java: 53)\ [org. apache. pulsar-pulsar-broker-2.2.0. jar: 2.2.0]\ at\ org. apache. pulsar-broker-2.2.0. jar: 2.2.0. jar: 2.2.0]\ at\ org. apache. pulsar-broker-2.2.0. jar: 2.2.0. jar: 2
  org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1676) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
  at org.apache.pulsar.broker.web.AuthenticationFilter.doFilter.duthenticationFilter.java:74) [org.apache.pulsar-pulsar-broker-common-2.2.0.jar:2.2.0] at
  org.eclipse.jetty.servlet. Servlet Handler \$ Cached Chain. do Filter (Servlet Handler. java: 1676) \\ [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar: 9.3.11.v20160721] \\ [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar: 9.3.11.v20160721] \\ [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar: 9.3.11.v20160721.jar: 
  at org.eclipse.jetty.servlet.ServletHandler.doHandle(ServletHandler.java:581) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
  org.eclipse.jetty.server.session.SessionHandler.doHandle(SessionHandler.java:224) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
  org.eclipse.jetty.server.handler.ContextHandler.doHandle(ContextHandler.java:1180) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
  org.eclipse.jetty.servlet.ServletHandler.doScope(ServletHandler.java:511) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
  org. eclipse. jetty. server. session. Session Handler. do Scope (Session Handler. java: 185) \\ [org. eclipse. jetty-jetty-server-9.3.11.v20160721. jar: 9.3.11.v20160721] \\ at the first of the first 
  org.eclipse.jetty.server.handler.ContextHandler.doScope(ContextHandler.java:1112) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
  org.eclipse.jetty.server.handler.ScopedHandler.handle(ScopedHandler.java:141) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
  org.eclipse.jetty.server.handler.ContextHandlerCollection.handle(ContextHandlerCollection.java:213) [org.eclipse.jetty-jetty-server-
  9.3.11.v20160721.jar: 9.3.11.v20160721]\ at\ org. eclipse.jetty.server. handler. Handler Collection. handle (Handler Collection.java: 119)\ [org. eclipse.jetty-jetty-server-landler]\ at\ org. eclipse.jetty-jetty-server-landler. Handler Collection. handle (Handler Collection.java: 119)\ [org. eclipse.jetty-jetty-server-landler]\ at\ org. eclipse.jetty-server-landler]\ at\ org. eclipse.jetty-server-landler]\ at\ org. eclipse.jetty-server-landler]\ at\ org. eclipse.jetty-server-landler]\ at\ org. eclipse.jetty-server-landle
  9.3.11.v20160721.jar: 9.3.11.v20160721] \ at org. eclipse.jetty.server.handler. Handler Wrapper.handle (Handler Wrapper.java: 134) \ [org. eclipse.jetty-jetty-server-landler] \ at org. \ at 
  9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.Server.handle(Server.java:524) [org.eclipse.jetty-jetty-server.
  9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpChannel.handle(HttpChannel.java:319) [org.eclipse.jetty-jetty-server-
  9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpConnection.onFillable(HttpConnection.java:253) [org.eclipse.jetty-jetty-server-
  9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-
  jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jo-
  9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.ssl.SslConnection.onFillable(SslConnection.java:202) [org.eclipse.jetty-jetty-io-
  9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.space.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.AbstractConnection.getty-io.
  jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jetty-io-
  9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.SelectChannelEndPoint$2.run(SelectChannelEndPoint.java:93) [org.eclipse.jetty-jetty-io-
  9.3.11.v20160721.jar:9.3.11.v20160721] at
  org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.executeProduceConsume[ExecuteProduceConsume.java:303] [org.apache.pulsar-functions-
  metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.produceConsume(ExecuteProduceConsume.java:148) [org.apache.pulsar-
  pulsar-functions-metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.run(ExecuteProduceConsume.java:136) [org.apache.pulsar-functions-metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.run(ExecuteProduceConsume.java:136)
  pulsar-functions-metrics-2.2.0.jar:?] at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1149) [?:1.8.0_171] at
  java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:624) [?:1.8.0_171] at
  io.netty.util.concurrent.FastThreadLocalRunnable.run(FastThreadLocalRunnable.java:30) [io.netty-netty-all-4.1.22.Final.jar:4.1.22.Final] at
  java.lang.Thread.run(Thread.java:748) [?:1.8.0_171] 12:27:31.669 [pulsar-web-53-27] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - -
  [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t6%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-"
  "Python/3.7 aiohttp/3.4.2" 385 12:27:31.669 [pulsar-web-53-31] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170.17.0.1 - 170
  [pulsar-web-53-29] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t8%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 371 12:27:31.643
  [pulsar-web-53-28] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST
  https://localhost:8081/admin/v2/persistent/tt1/testns1/t5%5Cmeta/permissions/testrole HTTP/1.1" 204 0 "-" "Python/3.7 aiohttp/3.4.2" 173 12:27:31.642 [pulsar-
  web-53-24] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 341
. title: Setting topic permission under load
  body: #### Expected behavior Do a REST call to admin interface for setting topic permissions like:
  https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole body: {'testrole': ['consume', 'produce']} Should work every time and return
  status 204. #### Actual behavior When this is done with heavy load setting up permission for many topics in parallel. Some will result in the below logged
  exception and status code 500. #### Steps to reproduce Set up tenant and namespace, then run the set permission for many different topics in that namespace in
```

parallel. I use the same role and actions for all of them. #### System configuration pulsar: 2.2.0 This error was when running the broker in standalone mode in a docker container supplied on docker hub, with authorisation and authentication via client certs. Have not tested on our full pulsar setup yet. #### Logs 12:27:31.613 [pulsar-web-53-28] INFO org.apache.pulsar.broker.admin.impl.PersistentTopicsBase - [superUser] Successfully granted access for role testrole: [produce, consume] - topic persistent://tt1/testns1/t5\meta 12:27:31.587 [pulsar-web-53-30] ERROR org.apache.pulsar.broker.admin.impl.PersistentTopicsBase -[superUser] Failed to grant permissions for topic persistent://tt1/testns1/t0\data org.apache.zookeeper.KeeperException\$BadVersionException: KeeperErrorCode = BadVersion for /admin/policies/tt1/testns1 at org.apache.zookeeper.KeeperException.create(KeeperException.java:118) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at org.apache.zookeeper.KeeperException.create(KeeperException.java:54) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at org.apache.zookeeper.ZooKeeper.setData(ZooKeeper.java:1336) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at org. apache. bookkeeper. ZooKeeper. ZooKeeorg.apache.bookkeeper.zookeeper.ZooKeeperClient\$21.call(ZooKeeperClient.java:1065) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at $org. a pache. bookkeeper. Zoo Keeper Client \$21. call (Zoo Keeper Client. java: 1059) \\ \sim [org. a pache. bookkeeper-bookkeeper-server-4.7.2. jar: 4.7.2] \\ a total (Zoo Keeper Client. java: 1059) \\ \sim [org. a pache. bookkeeper-bookkeeper-server-4.7.2. jar: 4.7.2] \\ a total (Zoo Keeper Client. java: 1059) \\ \sim [org. a pache. bookkeeper-bookkeeper-server-4.7.2. jar: 4.7.2] \\ a total (Zoo Keeper Client. java: 1059) \\ \sim [org. a pache. bookkeeper-bookkeeper-bookkeeper-server-4.7.2. jar: 4.7.2] \\ a total (Zoo Keeper Client. java: 1059) \\ \sim [org. a pache. bookkeeper-bookkee$ $org.apache.bookkeeper.ZooWorker.syncCallWithRetries (ZooWorker.java: 140) \sim [org.apache.bookkeeper-bookkeeper-server-4.7.2.jar: 4.7.2] \ at the control of the control of$ org.apache.bookkeeper.zookeeper.ZooKeeperClient.setData(ZooKeeperClient.java:1059) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at org.apache.pulsar.broker.admin.impl.PersistentTopicsBase.internalGrantPermissionsOnTopic(PersistentTopicsBase.java:274) [org.apache.pulsar-pulsar-broker-2.2.0. jar:2.2.0] at org.apache.pulsar.broker.admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic $2.2.0.jar; 2.2.0] \ at \ sun.reflect. Native Method Accessor Impl. invoke 0 (Native \ Method) \sim [?:1.8.0_171] \ at \ sun.reflect. Native Method Accessor Impl. invoke 0 (Native \ Method) \sim [?:1.8.0_171] \ at \ sun.reflect. Native Method Accessor Impl. invoke 0 (Native \ Method) \sim [?:1.8.0_171] \ at \ sun.reflect. Native Method Accessor Impl. invoke 0 (Native \ Method) \sim [?:1.8.0_171] \ at \ sun.reflect. Native Method Accessor Impl. invoke 0 (Native \ Method) \sim [?:1.8.0_171] \ at \ sun.reflect. Native Method Accessor Impl. invoke 0 (Native \ Method) \sim [?:1.8.0_171] \ at \ sun.reflect. Native Method Accessor Impl. invoke 0 (Native \ Method) \sim [?:1.8.0_171] \ at \ sun.reflect. Native Method Accessor Impl. invoke 0 (Native \ Method) \sim [?:1.8.0_171] \ at \ sun.reflect. Native Method Accessor Impl. invoke 0 (Native \ Method) \sim [?:1.8.0_171] \ at \ sun.reflect. Native Method Accessor Impl. invoke 0 (Native \ Method) \sim [?:1.8.0_171] \ at \ sun.reflect. Native Method Accessor Impl. invoke 0 (Native \ Method) \sim [?:1.8.0_171] \ at \ sun.reflect. Native Method Accessor Impl. invoke 0 (Native \ Method) \sim [?:1.8.0_171] \ at \ sun.reflect. Native Method Accessor Impl. invoke 0 (Native \ Method) \sim [?:1.8.0_171] \ at \ sun.reflect. Native Method Accessor Impl. invoke 0 (Native \ Method) \sim [?:1.8.0_171] \ at \ sun.reflect. Native Method Accessor Impl. invoke 0 (Native \ Method) \sim [?:1.8.0_171] \ at \ sun.reflect. Native Method Accessor Impl. invoke 0 (Native \ Method) \sim [?:1.8.0_171] \ at \ sun.reflect. Native Method Accessor Impl. invoke 0 (Native \ Method) \sim [?:1.8.0_171] \ at \ sun.reflect. Native Method Accessor Impl. invoke 0 (Native \ Method) \sim [?:1.8.0_171] \ at \ sun.reflect. Native Method Accessor Impl. invoke 0 (Native \ Method) \sim [?:1.8.0_171] \ at \ sun.reflect. Native Method Accessor Impl. invoke 0 (Native \ Method) \sim [?:1.8.0_171] \ at \ sun.reflect. Native Method Accessor Impl. invoke 0 (Native \ Method) \sim [?:1.8.0_171] \ at \ sun.reflect. Native Method Accessor Impl. invoke 0 (Native \ Method) \ at \ sun.reflect$ sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62) ~[?:1.8.0_171] at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43) ~[?:1.8.0_171] at java.lang.reflect.Method.invoke(Method.java:498) ~[?:1.8.0_171] at org, glass fish, jersey. server. model. internal. Resource Method Invocation Handler Factory \$1. invoke (Resource Method Invocation Handler Factory. java: \$1)

```
[org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
       org. glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher \$1. run (Abstract Java Resource Method Dispatcher. java: 144)
       [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
       org.glassfish.jersey.server.model.internal.AbstractJavaResourceMethodDispatcher.invoke(AbstractJavaResourceMethodDispatcher.java:161)
       [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
       org. glass fish. jersey. server. model. internal. Java Resource Method Dispatcher Provider \$Void Out Invoker. do Dispatch (Java Resource Method Dispatcher Provider. java: 143)
       [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
       org. glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher. java: 99) \\
       [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.invoke(ResourceMethodInvoker.java:389)
        [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:347)
        [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:102)
       [org. glassfish.jersey.core-jersey-server-2.25.jar:?] at org. glassfish.jersey.server.ServerRuntime$2.run(ServerRuntime.java:326) [org. glassfish.jersey.core-jersey-
       server-2.25.jar:?] at org.glassfish.jersey.internal.Errors$1.call(Errors.java:271) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
       org.glassfish.jersey.internal.Errors$1.call(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
       org.glassfish.jersey.internal.Errors.process(Errors.java:315) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
       org.glassfish.jersey.internal.Errors.process(Errors.java:297) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at org.glassfish.jersey.internal.Errors.process(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
       org.glassfish.jersey.process.internal.RequestScope.runInScope(RequestScope.java:317) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
       org.glassfish.jersey.server.ServerRuntime.process(ServerRuntime.java:305) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
       org.glassfish.jersey.server.ApplicationHandler.handle(ApplicationHandler.java:1154) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
       org.glassfish.jersey.servlet.WebComponent.serviceImpl(WebComponent.java:473) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
       org.glassfish.jersey.servlet.WebComponent.service(WebComponent.java:427) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
       org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:388) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
       org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:341) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
       org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:228) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
       org. eclipse. jetty. servlet. Servlet Holder. handle (Servlet Holder. java: 845) \\ [org. eclipse. jetty-jetty-servlet-9.3.11. v 20160721. jar: 9.3.11. v 20160721] \\ [attitude a transfer of the proposition of the proposit
       org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1689) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
       at org.apache.pulsar.broker.web.ResponseHandlerFilter.doFilter(ResponseHandlerFilter.java:53) [org.apache.pulsar-pulsar-broker-2.2.0.jar:2.2.0] at
       org, eclipse, jetty, servlet. ServletHandler $CachedChain. doFilter (ServletHandler, java: 1676) [org, eclipse, jetty-jetty-servlet-9.3.11, v20160721, jar: 9.3.11, v20160721]
       at org.apache.pulsar.broker.web.AuthenticationFilter.doFilter(AuthenticationFilter.java:74) [org.apache.pulsar-pulsar-broker-common-2.2.0.jar:2.2.0] at
       org.eclipse.jetty.servlet.ServletHandler\\ \$CachedChain.doFilter\\ (ServletHandler.java:1676)\\ [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]\\
       at\ org. eclipse. jetty. servlet. Servlet Handler. do Handler. java: 581)\ [org. eclipse. jetty-jetty-servlet-9.3.11.v20160721. jar: 9.3.11.v20160721]\ at\ org. eclipse. jetty-jetty-servlet-9.3.11.v20160721. jar: 9.3.11.v20160721. jar: 9.3.11.v
       org.eclipse.jetty.server.session.SessionHandler.doHandle(SessionHandler.java:224) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.server.handler.ContextHandler.doHandle(ContextHandler.java:1180) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.servlet.ServletHandler.doScope(ServletHandler.java:511) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.server.session.SessionHandler.doScope(SessionHandler.java:185) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.server.handler.ContextHandler.doScope(ContextHandler.java:1112) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.server.handler.ScopedHandler.handle(ScopedHandler.java:141) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.server.handler.ContextHandlerCollection.handle(ContextHandlerCollection.java:213) [org.eclipse.jetty-jetty-server-
       9.\tilde{3}.11.v20160721.jar: 9.3.11.v20160721] \ at org. eclipse.jetty.server.handler. Handler Collection.handle (Handler Collection.java: 119) [org. eclipse.jetty-jetty-server-handler. Handler Collection.handler. Handler Collection.java: 119) [org. eclipse.jetty-jetty-server-handler. Handler Collection.handler. Handler Collection.java: 119) [org. eclipse.jetty-jetty-server-handler. Handler. Handle
       9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerWrapper.handle(HandlerWrapper.java:134) [org.eclipse.jetty-jetty-server-
       9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.Server.handle(Server.java:524) [org.eclipse.jetty-jetty-server-
       9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpChannel.handle(HttpChannel.java:319) [org.eclipse.jetty-jetty-server-
       9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpConnection.onFillable(HttpConnection.java:253) [org.eclipse.jetty-jetty-server-
       9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.java:273]
       jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jetty-io-
       9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.jo.ssl.SslConnection.onFillable(SslConnection.java:202) [org.eclipse.jetty-jetty-jo-
       9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-
       jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jetty-io-
       9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.jo.SelectChannelEndPoint$2.run(SelectChannelEndPoint.java:93) [org.eclipse.jetty-jetty-jo-
       9.3.11.v20160721.jar:9.3.11.v20160721] at
       org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.executeProduceConsume(ExecuteProduceConsume.java:303) [org.apache.pulsar-pulsar-functions-
       metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.produceConsume(ExecuteProduceConsume.java:148) [org.apache.pulsar-
       pulsar-functions-metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.run(ExecuteProduceConsume.java:136) [org.apache.pulsar-functions-metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.run(ExecuteProduceConsume.java:136)
       pulsar-functions-metrics-2.2.0.jar:?] at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1149) [?:1.8.0_171] at
       java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:624) [?:1.8.0_171] at
       io.netty.util.concurrent.FastThreadLocalRunnable.run(FastThreadLocalRunnable.java:30) [io.netty-netty-all-4.1.22.Final.jar:4.1.22.Final] at
       java.lang.Thread.run(Thread.java:748) [?:1.8.0_171] 12:27:31.669 [pulsar-web-53-27] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - -
       [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t6%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-"
       "Python/3.7 aiohttp/3.4.2" 385 12:27:31.669 [pulsar-web-53-31] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t7%5Cmeta/permissions/testrole HTTP/1.1" 500 5652 "-" "Python/3.7 aiohttp/3.4.2" 402 12:27:31.668
       [pulsar-web-53-29] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST
       https://localhost:8081/admin/v2/persistent/tt1/testns1/t8%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 371 12:27:31.643
       [pulsar-web-53-28] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST
       https://localhost: 8081/admin/v2/persistent/tt1/testns1/t5\%5Cmeta/permissions/testrole\ HTTP/1.1"\ 204\ 0"-"\ "Python/3.7\ aiohttp/3.4.2"\ 173\ 12:27:31.642\ [pulsar-permissions/testrole\ HTTP/1.1"\ 204\ 0"-"\ "Python/3.7\ aiohttp/3.4.2"\ aiohttp/3.4.2"\ aiohttp/3.4.2"\ aiohttp/3.4.2"\ aiohttp/3.4.2"\ aiohttp/3.4.2"\ aiohttp/3.4.2"\ aiohttp/3
       web-53-24] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 341
12. title: Setting topic permission under load
       body: #### Expected behavior Do a REST call to admin interface for setting topic permissions like:
       https://localhost: 8081/admin/v2/persistent/tt1/testns1/t4\%5C data/permissions/testrole\ body: \{'testrole': ['consume', 'produce']\}\ Should\ work\ every\ time\ and\ return\ below the produce of the p
       status 204. #### Actual behavior When this is done with heavy load setting up permission for many topics in parallel. Some will result in the below logged
       exception and status code 500. #### Steps to reproduce Set up tenant and namespace, then run the set permission for many different topics in that namespace in
```

https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole body: {'testrole': ['consume', 'produce']} Should work every time and return status 204. #### Actual behavior When this is done with heavy load setting up permission for many topics in parallel. Some will result in the below logged exception and status code 500. #### Steps to reproduce Set up tenant and namespace, then run the set permission for many different topics in that namespace in parallel. I use the same role and actions for all of them. #### System configuration pulsar: 2.2.0 This error was when running the broker in standalone mode in a docker container supplied on docker hub, with authorisation and authentication via client certs. Have not tested on our full pulsar setup yet. #### Logs 12:27:31.613 [pulsar-web-53-28] INFO org.apache.pulsar.broker.admin.impl.PersistentTopicsBase - [superUser] Successfully granted access for role testrole: [produce, consume] - topic persistent://tt1/testns1/t5\meta 12:27:31.587 [pulsar-web-53-30] ERROR org.apache.pulsar.broker.admin.impl.PersistentTopicsBase - [superUser] Failed to grant permissions for topic persistent://tt1/testns1/t0\data org.apache.zookeeper.KeeperException\$BadVersionException: KeeperErrorCode = BadVersion for /admin/policies/tt1/testns1 at org.apache.zookeeper.KeeperException.create(KeeperException.create(KeeperException.java:118) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at org.apache.zookeeper.KeeperException.create(KeeperException.java:19) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at org.apache.bookkeeper.zookeeper.ZooKeeperClient.access\$3101(ZooKeeperClient.java:1065) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at org.apache.bookkeeper.zookeeper.ZooKeeperClient.\$21.call(ZooKeeperClient.java:1059) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at org.apache.bookkeeper.zookeeper.ZooKeeperClient.setData(ZooKeeperClient.java:1059) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at org.apache.bookkeeper

```
sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62) ~[?:1.8.0_171] at
         sun.reflect. Delegating Method Accessor Impl. invoke (Delegating Method Accessor Impl. java: 43) \sim \cite{Continuous Method} (Polegating Method Accessor Impl. java: 43) \sim \cite{Continuous Method Accessor Impl. java: 43)} \sim \c
         java.lang.reflect.Method.invoke(Method.java:498) ~[?:1.8.0_171] at
         org, glassfish. jersey. server. model. internal. Resource Method Invocation Handler Factory, $1. invoke (Resource Method Invocation Handler Factory, java: 81)
         [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
         org. glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher \$1. run (Abstract Java Resource Method Dispatcher. java: 144) and the properties of the properties 
         [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
         org. glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher. invoke (Abstract Java Resource Method Dispatcher. java: 161) and the property of the property of
         [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
         org, glassfish, jersey, server.model.internal.JavaResourceMethodDispatcherProvider$VoidOutInvoker.doDispatch(JavaResourceMethodDispatcherProvider.java:143)
         [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
         org. glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher. dispatch (Abstract Java Resource Method Dispatcher. java: 99)\\
         [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.invoke(ResourceMethodInvoker.java:389)
         [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:347)
         [org. glassfish.jersey.core-jersey-server-2.25.jar:?] at org. glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:102)
         [org. glassfish.jersey.core-jersey-server-2.25.jar:?] at org. glassfish.jersey.server.ServerRuntime$2.run(ServerRuntime.java:326) [org. glassfish.jersey.core-jersey-
         server-2.25.jar:?] at org.glassfish.jersey.internal.Errors$1.call(Errors.java:271) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
         org. glass fish. jersey. internal. Errors \$1. call (Errors. java: 267) \ [org. glass fish. jersey. core-jersey-common-2.25. jar:?] \ at the property of the 
         org.glassfish.jersey.internal.Errors.process(Errors.java:315) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
        org.glassfish.jersey.internal.Errors.process(Errors.java:297) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at org.glassfish.jersey.internal.Errors.process(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
         org.glassfish.jersey.process.internal.RequestScope.runInScope(RequestScope.java:317) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
         org.glassfish.jersey.server.ServerRuntime.process(ServerRuntime.java:305) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
         org.glassfish.jersey.server.ApplicationHandler.handle(ApplicationHandler.java:1154) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
         org. glass fish. jersey. servlet. Web Component. service Impl (Web Component. java: 473) \ [org. glass fish. jersey. container-servlet-core-2.25. jar:?] \ at the container of the container of
         org.glassfish.jersey.servlet.WebComponent.service(WebComponent.java:427) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
         org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:388) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
         org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:341) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
         org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:228) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
         org.eclipse.jetty.servlet.ServletHolder.handle(ServletHolder.java:845) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
         org.eclipse.jetty.servlet. Servlet Handler \$ Cached Chain. do Filter (Servlet Handler.java: 1689) \ [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar: 9.3.11.v20160721] \ [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar: 9.3.11.v20160721] \ [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar: 9.3.11.v20160721.jar: 9
         at org.apache.pulsar.broker.web.ResponseHandlerFilter.doFilter(ResponseHandlerFilter.java:53) [org.apache.pulsar-pulsar-broker-2.2.0.jar:2.2.0] at
         org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1676) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
         at org.apache.pulsar.broker.web.AuthenticationFilter.doFilter(AuthenticationFilter.java:74) [org.apache.pulsar-pulsar-broker-common-2,2,0.jar:2,2,0] at
         org.eclipse.jetty.servlet.ServletHandler\\ \$CachedChain.doFilter\\ (ServletHandler.java:1676)\\ [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]\\
         at org.eclipse.jetty.servlet.ServletHandler.doHandle(ServletHandler.java:581) [org.eclipse.jetty-jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
         org.eclipse.jetty.server.session.SessionHandler.doHandle(SessionHandler.java:224) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
        org.eclipse.jetty.server.handler.ContextHandler.doHandle(ContextHandler.java:1180) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.servlet.ServletHandler.doScope(ServletHandler.java:511) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
         org.eclipse.jetty.server.session.SessionHandler.doScope(SessionHandler.java:185) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
         org.eclipse.jetty.server.handler.ContextHandler.doScope(ContextHandler.java:1112) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
         org.eclipse.jetty.server.handler.ScopedHandler.handle(ScopedHandler.java:141) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
         org.eclipse.jetty.server.handler.Context Handler Collection.handle (Context Handler Collection.java: 213) \ [org.eclipse.jetty-jetty-server-left] \ [org.eclipse.jetty-jetty-jetty-server-left] \ [org.eclipse.jetty-jetty-server-left] \ [org.eclipse.jetty-server-left] \ [org.eclipse.jetty-server-left
         9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerCollection.handle(HandlerCollection.java:119) [org.eclipse.jetty-jetty-server-
         9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerWrapper.handle(HandlerWrapper.java:134) [org.eclipse.jetty-jetty-server-
        9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.Server.handle(Server.java:524) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpChannel.handle(HttpChannel.java:319) [org.eclipse.jetty-jetty-server-9.3.11.v20160721] at org.eclipse.jetty.server.HttpChannel.java:319) [org.eclipse.jetty-jetty-server-9.3.11.v20160721] at org.eclipse.jetty-jetty-server-9.3.11.v20160721] at org.e
         9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpConnection.onFillable(HttpConnection.java:253) [org.eclipse.jetty-jetty-server-
         9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-
         jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jetty-io-
         9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.ssl.SslConnection.onFillable(SslConnection.java:202) [org.eclipse.jetty-jetty-jo-
         9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-
         jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jetty-io-
         9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.SelectChannelEndPoint$2.run(SelectChannelEndPoint.java:93) [org.eclipse.jetty-jetty-jo-
         9.3.11.v20160721.jar:9.3.11.v20160721] at
         org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.executeProduceConsume(ExecuteProduceConsume.java:303) [org.apache.pulsar-functions-
         metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume,produceConsume(ExecuteProduceConsume.java:148) [org.apache.pulsar-
         pulsar-functions-metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.run(ExecuteProduceConsume.java:136) [org.apache.pulsar-
         pulsar-functions-metrics-2.2.0.jar:?] at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1149) [?:1.8.0_171] at
         java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:624) [?:1.8.0_171] at
         io.netty.util.concurrent.FastThreadLocalRunnable.run(FastThreadLocalRunnable.java:30) [io.netty-netty-all-4.1.22.Final.jar:4.1.22.Final] at
         java.lang.Thread.run(Thread.java:748) [?:1.8.0_171] 12:27:31.669 [pulsar-web-53-27] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 -
         [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t6%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-"
        "Python/3.7 aiohttp/3.4.2" 385 12:27:31.669 [pulsar-web-53-31] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t7%5Cmeta/permissions/testrole HTTP/1.1" 500 5652 "-" "Python/3.7 aiohttp/3.4.2" 402 12:27:31.668
        [pulsar-web-53-29] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t8%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 371 12:27:31.643 [pulsar-web-53-28] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST
         https://localhost:8081/admin/v2/persistent/tt1/testns1/t5%5Cmeta/permissions/testrole HTTP/1.1" 204 0 "-" "Python/3.7 aiohttp/3.4.2" 173 12:27:31.642 [pulsar-
        web-53-24] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 341
13. title: Setting topic permission under load
         body: #### Expected behavior Do a REST call to admin interface for setting topic permissions like:
         https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole body: {'testrole': ['consume', 'produce']} Should work every time and return
         status 204. #### Actual behavior When this is done with heavy load setting up permission for many topics in parallel. Some will result in the below logged
         exception and status code 500. #### Steps to reproduce Set up tenant and namespace, then run the set permission for many different topics in that namespace in
         parallel. I use the same role and actions for all of them. #### System configuration pulsar: 2.2.0 This error was when running the broker in standalone mode in a
         docker container supplied on docker hub, with authorisation and authentication via client certs. Have not tested on our full pulsar setup yet. #### Logs
         12:27:31.613 [pulsar-web-53-28] INFO org.apache.pulsar.broker.admin.impl.PersistentTopicsBase - [superUser] Successfully granted access for role testrole:
         [produce, consume] - topic persistent://tt1/testns1/t5\meta 12:27:31.587 [pulsar-web-53-30] ERROR org.apache.pulsar.broker.admin.impl.PersistentTopicsBase -
         [superUser] Failed to grant permissions for topic persistent://tt1/testns1/t0\data org.apache.zookeeper.KeeperException$BadVersionException: KeeperErrorCode
          = BadVersion for /admin/policies/tt1/testns1 at org.apache.zookeeper.KeeperException.create(KeeperException.java:118) ~[org.apache.pulsar-pulsar-zookeeper-
```

2.2.0.jar:2.2.0] at org.apache.zookeeper.KeeperException.create(KeeperException.java:54) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at

 $org.apache.bookkeeper.ZooKeeper.Client.access\$3101(ZooKeeperClient.java:70) \sim [org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] \ at org.apache.bookkeeper.ZooKeeper.Client\$21.call(ZooKeeperClient.java:1065) \sim [org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] \ at org.apache.bookkeeper.ZooKeeper.Client\$21.call(ZooKeeperClient.java:1065) \sim [org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] \ at org.apache.bookkeeper.ZooKeeper.Client\$21.call(ZooKeeperClient.java:1065) \sim [org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] \ at org.apache.bookkeeper.ZooKeeper.ZooKeeper.Client\$21.call(ZooKeeper.Client.java:1065) \ archives.2000 \ archive$

org.apache.zookeeper.ZooKeeper.setData(ZooKeeper.java:1336) ~[org.apache.pulsar-zookeeper-2.2.0.jar:2.2.0] at

2.2.0.jar:2.2.0] at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method) \sim [?: $1.8.0_171$] at

```
org.apache.bookkeeper.ZooKeeperClient\$21.call(ZooKeeperClient.java:1059) \\ \sim [org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] \\ at 2.jar:4.7.2 \\ at 3.jar:4.7.2 \\ at 3.jar:4.7 \\ at
           org. apache. bookkeeper. Zoo Worker. sync Call With Retries (Zoo Worker. java: 140) \\ \sim [org. apache. bookkeeper-bookkeeper-server-4.7.2. jar: 4.7.2] at the properties of t
           org. apache. bookkeeper. ZooKeeper Client. set Data (ZooKeeper Client. java: 1059) \sim [org. apache. bookkeeper-bookkeeper-server-4.7.2. jar: 4.7.2] \ at the contract of the 
           org.apache.pulsar.broker.admin.impl.PersistentTopicsBase.internalGrantPermissionsOnTopic(PersistentTopicsBase.java:274) [org.apache.pulsar-pulsar-broker-
           2.2.0.jar:2.2.0] at org.apache.pulsar.broker.admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic)OnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic)OnTopic(PersistentOnTopic)Ontopic(PersistentOnTopic)Ontopic(PersistentOnTopic)Ontopi
           2.2.0.jar:2.2.0] at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method) ~[?:1.8.0_171] at
           sun.reflect. Native Method Accessor Impl. invoke (Native Method Accessor Impl. java: 62) \sim \cite{Continuous} at the continuous of the continuous continu
           sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43) ~[?:1.8.0_171] at
           java.lang.reflect.Method.invoke(Method.java:498) ~[?:1.8.0 171] at
           org.glassfish.jersey.server.model.internal.ResourceMethodInvocationHandlerFactory$1.invoke(ResourceMethodInvocationHandlerFactory.java:81)
           [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
           org.glassfish.jersey.server.model.internal.AbstractJavaResourceMethodDispatcher$1.run(AbstractJavaResourceMethodDispatcher.java:144)
           [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
           org. glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher. invoke (Abstract Java Resource Method Dispatcher. java: 161) and the property of the property of
           [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
           org, glassfish.jersey.server.model.internal.JavaResourceMethodDispatcherProvider$VoidOutInvoker.doDispatch(JavaResourceMethodDispatcherProvider.java:143)
           [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
           org. glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher. dispatch (Abstract Java Resource Method Dispatcher. java: 99) and the property of the property o
           [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.invoke(ResourceMethodInvoker.java:389)
            [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:347)
            [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:102)
           [org. glassfish.jersey.core-jersey-server-2.25.jar:?] at org. glassfish.jersey.server.ServerRuntime$2.run(ServerRuntime.java:326) [org. glassfish.jersey.core-jersey-server.
           server-2.25.jar:?] at org.glassfish.jersey.internal.Errors$1.call(Errors.java:271) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
           org.glassfish.jersey.internal.Errors$1.call(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
           org.glassfish.jersey.internal.Errors.process(Errors.java:315) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
          org.glassfish.jersey.internal.Errors.process(Errors.java:297) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at org.glassfish.jersey.internal.Errors.process(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
           org,glassfish.jersey.process.internal.RequestScope.runInScope(RequestScope.java:317) [org,glassfish.jersey.core-jersey-common-2.25.jar:?] at
           org.glassfish.jersey.server.ServerRuntime.process(ServerRuntime.java:305) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
           org.glassfish.jersey.server.ApplicationHandler.handle(ApplicationHandler.java:1154) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
           org. glass fish. jersey. servlet. Web Component. service Impl (Web Component. java: 473) \ [org. glass fish. jersey. containers-jersey-container-servlet-core-2.25. jar:?] \ at
           org.glassfish.jersey.servlet.WebComponent.service(WebComponent.java:427) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
           org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:388) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
           org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:341) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
           org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:228) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
           org.eclipse.jetty.servlet. Servlet Holder. handle (Servlet Holder. java: 845) \ [org.eclipse.jetty-servlet-9.3.11.v20160721.jar: 9.3.11.v20160721] \ at the servlet of th
           org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1689) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
           at org.apache.pulsar.broker.web.ResponseHandlerFilter.doFilter(ResponseHandlerFilter.java:53) [org.apache.pulsar-broker-2.2.0.jar:2.2.0] at
          org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1676) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at org.apache.pulsar.broker.web.AuthenticationFilter.duthenticationFilter.java:74) [org.apache.pulsar-pulsar-broker-common-2.2.0.jar:2.2.0] at
           org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1676) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
           at org.eclipse.jetty.servlet.ServletHandler.doHandle(ServletHandler.java:581) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
           org.eclipse.jetty.server.session. Session Handler. do Handle (Session Handler.java: 224) \\ [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar: 9.3.11.v20160721] \\ [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar: 9.3.11.v20160721] \\ [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar: 9.3.11.v20160721] \\ [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar: 9.3.11.v20160721] \\ [org.eclipse.jetty-server-9.3.11.v20160721.jar: 9.3.11.v20160721.jar: 9.3.11.v201
           org.eclipse.jetty.server.handler.ContextHandler.doHandle(ContextHandler.java:1180) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
           org.eclipse.jetty.servlet.ServletHandler.doScope(ServletHandler.java:511) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
           org.eclipse.jetty.server.session.SessionHandler.doScope(SessionHandler.java:185) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
           org.eclipse.jetty.server.handler.ContextHandler.doScope(ContextHandler.java:1112) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
           org.eclipse.jetty.server.handler.ScopedHandler.handle(ScopedHandler.java:141) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
           org. eclipse. jetty. server. handler. Context Handler Collection. handle (Context Handler Collection. java: 213) \ [org. eclipse. jetty-jetty-server-handler. Context Handler Collection. handle (Context Handler Collection. java: 213) \ [org. eclipse. jetty-jetty-server-handler. Context Handler Collection. handle (Context Handler Collection. java: 213) \ [org. eclipse. jetty-jetty-server-handler. Context Handler Collection. handle (Context Handler Collection. java: 213) \ [org. eclipse. jetty-jetty-server-handler. Context Handler Collection. java: 213) \ [org. eclipse. jetty-jetty-server-handler. Context Handler. Context Handle
           9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerCollection.handle(HandlerCollection.java:119) [org.eclipse.jetty-jetty-server-
           9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerWrapper.handle(HandlerWrapper.java:134) [org.eclipse.jetty-jetty-server-
           9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.Server.handle(Server.java:524) [org.eclipse.jetty-jetty-server-
           9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpChannel.handle(HttpChannel.java:319) [org.eclipse.jetty-jetty-server-
           9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpConnection.onFillable(HttpConnection.java:253) [org.eclipse.jetty-jetty-server-
           9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.java:273]
           jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jetty-io-
           9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.jo.ssl.SslConnection.onFillable(SslConnection.java:202) [org.eclipse.jetty-jetty-jo-
           9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-
           jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jo-
           9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.SelectChannelEndPoint$2.run(SelectChannelEndPoint.java:93) [org.eclipse.jetty-jetty-io-
           9.3.11.v20160721.jar:9.3.11.v20160721] at
           org.eclipse.jetty.util.thread.strategy. Execute Produce Consume. execute Produce Consume (Execute Produce Consume.java: 303) \\ [org.apache.pulsar-functions-consume] \\ [org.apache.pulsar-functions-consume]
           metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume,produceConsume(ExecuteProduceConsume,java:148) [org.apache.pulsar-
           pulsar-functions-metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.run(ExecuteProduceConsume.java:136) [org.apache.pulsar-
           pulsar-functions-metrics-2.2.0.jar:?] at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1149) [?:1.8.0_171] at
           java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:624) [?:1.8.0_171] at
           io.netty.util.concurrent.FastThreadLocalRunnable.run(FastThreadLocalRunnable.java:30) [io.netty-netty-all-4.1.22.Final.jar:4.1.22.Final] at
           java.lang.Thread.run(Thread.java:748) [?:1.8.0_171] 12:27:31.669 [pulsar-web-53-27] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t6%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-"
            "Python/3.7 aiohttp/3.4.2" 385 12:27:31.669 [pulsar-web-53-31] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST"
           https://localhost:8081/admin/v2/persistent/tt1/testns1/t7%5Cmeta/permissions/testrole HTTP/1.1" 500 5652 "-" "Python/3.7 aiohttp/3.4.2" 402 12:27:31.668
           [pulsar-web-53-29] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST"
           https://localhost:8081/admin/v2/persistent/tt1/testns1/t8%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 371 12:27:31.643 [pulsar-web-53-28] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - [07/Nov/2018:12:27:31 +0000] "POST
           https://localhost:8081/admin/v2/persistent/tt1/testns1/t5%5Cmeta/permissions/testrole HTTP/1.1" 204 0 "-" "Python/3.7 aiohttp/3.4.2" 173 12:27:31.642 [pulsar-
           web-53-24] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 341
14. title: Setting topic permission under load
           body: #### Expected behavior Do a REST call to admin interface for setting topic permissions like:
           https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole body: {'testrole': ['consume', 'produce']} Should work every time and return
           status 204. #### Actual behavior When this is done with heavy load setting up permission for many topics in parallel. Some will result in the below logged
           exception and status code 500. #### Steps to reproduce Set up tenant and namespace, then run the set permission for many different topics in that namespace in
```

parallel. I use the same role and actions for all of them. #### System configuration pulsar: 2.2.0 This error was when running the broker in standalone mode in a docker container supplied on docker hub, with authorisation and authentication via client certs. Have not tested on our full pulsar setup yet. #### Logs 12:27:31.613 [pulsar-web-53-28] INFO org.apache.pulsar.broker.admin.impl.PersistentTopicsBase - [superUser] Successfully granted access for role testrole: [produce, consume] - topic persistent://tt1/testns1/t5\meta 12:27:31.587 [pulsar-web-53-30] ERROR org.apache.pulsar.broker.admin.impl.PersistentTopicsBase - [superUser] Failed to grant permissions for topic persistent://tt1/testns1/t0\data org.apache.zookeeper.KeeperException\$BadVersionException: KeeperErrorCode

```
= BadVersion\ for\ /admin/policies/tt1/testns1\ at\ org.apache.zookeeper. Keeper Exception.create (Keeper Exception.java:118)\ \sim [org.apache.pulsar-pulsar-zookeeper-Keeper Exception.create]
2.2.0. jar: 2.2.0] \ at org. a pache. zookeeper. Keeper Exception. create (Keeper Exception. java: 54) \\ \sim [org. a pache. pulsar-pulsar-zookeeper-2.2.0. jar: 2.2.0] \ at org. a pache. pulsar-zookeeper-2.2.0. jar: 2.2.0. ja
org.apache.zookeeper.ZooKeeper.setData(ZooKeeper.java:1336) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at org.apache.bookkeeper.zookeeper.ZooKeeperClient.access$3101(ZooKeeperClient.java:70) ~[org.apache.bookkeeper-bookkeeper-4.7.2.jar:4.7.2] at
org.apache.bookkeeper.zookeeper.ZooKeeperClient$21.call(ZooKeeperClient.java:1065) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
org.apache.bookkeeper.zookeeper.ZooKeeperClient$21.call(ZooKeeperClient.java:1059) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
org.apache.bookkeeper.ZooWorker.syncCallWithRetries(ZooWorker.java:140) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
org.apache.bookkeeper.zookeeper.ZooKeeperClient.setData(ZooKeeperClient.java:1059) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
org.apache.pulsar.broker.admin.impl.PersistentTopicsBase.internalGrantPermissionsOnTopic(PersistentTopicsBase.java:274) [org.apache.pulsar-proker-
2.2.0.jar:2.2.0] at org.apache.pulsar.broker.admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-broker-admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopics.grantPermissionsOnTopic(PersistentTopic)Ontopic(PersistentOnTopic)Ontopic(PersistentOnTopic)Ontopic(Persis
2.2.0.jar:2.2.0] at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method) ~[?:1.8.0_171] at
sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62) ~[?:1.8.0_171] at
sun.reflect. Delegating Method Accessor Impl. invoke (Delegating Method Accessor Impl. java: 43) \sim \cite{Continuous Method} (Polegating Method Accessor Impl. java: 43) \sim \cite{Continuous Method Accessor Impl. java: 43)} \sim \c
java.lang.reflect.Method.invoke(Method.java:498) ~[?:1.8.0_171] at
org, glass fish. jersey. server. model. internal. Resource Method Invocation Handler Factory $1. invoke (Resource Method Invocation Handler Factory, java: 81)
[org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
org.glassfish.jersey.server.model.internal.AbstractJavaResourceMethodDispatcher$1.run(AbstractJavaResourceMethodDispatcher.java:144)
[org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
org, glass fish, jersey. server. model. internal. Abstract Java Resource Method Dispatcher. invoke (Abstract Java Resource Method Dispatcher. java: 161) and the properties of the properties 
[org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
org.glassfish.jersey.server.model.internal.JavaResourceMethodDispatcherProvider$VoidOutInvoker.doDispatch(JavaResourceMethodDispatcherProvider.java:143)
[org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
org. glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher. dispatch (Abstract Java Resource Method Dispatcher. java: 99) \\
[org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.invoke(ResourceMethodInvoker.java:389)
[org. glassfish.jersey.core-jersey-server-2.25.jar:?] at org. glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:347)
[org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:102)
[org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.ServerRuntime$2.run(ServerRuntime.java:326) [org.glassfish.jersey.server-2.25.jar:?] at org.glassfish.jersey.server.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRuntime.ServerRu
server-2.25.jar:?] at org.glassfish.jersey.internal.Errors$1.call(Errors.java:271) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
org.glassfish.jersey.internal.Errors$1.call(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
org.glassfish.jersey.internal.Errors.process(Errors.java:315) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
org. glass fish. jersey. internal. Errors. process (Errors. java: 297) \ [org. glass fish. jersey. core-jersey-common-2.25. jar:?] \ at the process of the
org.glassfish.jersey.internal.Errors.process(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
org.glassfish.jersey.process.internal.RequestScope.runInScope(RequestScope.java:317) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
org.glassfish.jersey.server.ServerRuntime.process(ServerRuntime.java:305) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.ApplicationHandler.handle(ApplicationHandler.java:1154) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
org. glass fish. jersey. servlet. Web Component. service Impl (Web Component. java: 473) \ [org. glass fish. jersey. containers-jersey-container-servlet-core-2.25. jar:?] \ at the container of the container o
org.glassfish.jersey.servlet.WebComponent.service(WebComponent.java:427) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:388) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:341) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:228) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
org.eclipse.jetty.servlet.ServletHolder.handle(ServletHolder.java:845) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1689) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
at org.apache.pulsar.broker.web.ResponseHandlerFilter.doFilter(ResponseHandlerFilter.java:53) [org.apache.pulsar-pulsar-broker-2.2.0.jar:2.2.0] at
org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1676) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
at org.apache.pulsar.broker.web.AuthenticationFilter.doFilter.duthenticationFilter.java:74) [org.apache.pulsar-pulsar-broker-common-2.2.0.jar:2.2.0] at
org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1676) [org.eclipse.jetty-jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
at org.eclipse.jetty.servlet.ServletHandler.doHandle(ServletHandler.java:581) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
org.eclipse.jetty.server.session. Session Handler.do Handle (Session Handler.java: 224) \\ [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar: 9.3.11.v20160721] \\ at the first of the following the properties of the first of
org.eclipse.jetty.server.handler.ContextHandler.doHandle(ContextHandler.java:1180) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
org.eclipse.jetty.servlet.ServletHandler.doScope(ServletHandler.java:511) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
org.eclipse.jetty.server.session.SessionHandler.doScope(SessionHandler.java:185) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
org.eclipse.jetty.server.handler.ContextHandler.doScope(ContextHandler.java:1112) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
org.eclipse.jetty.server.handler.ScopedHandler.handle(ScopedHandler.java:141) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
org.eclipse.jetty.server.handler.ContextHandlerCollection.handle(ContextHandlerCollection.java:213) [org.eclipse.jetty-jetty-server-
9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerCollection.handle(HandlerCollection.java:119) [org.eclipse.jetty-jetty-server-
9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerWrapper.handle(HandlerWrapper.java:134) [org.eclipse.jetty-jetty-server-
9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.Server.handle(Server.java:524) [org.eclipse.jetty-jetty-server-
9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpChannel.handle(HttpChannel.java:319) [org.eclipse.jetty-jetty-server-
9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpConnection.onFillable(HttpConnection.java:253) [org.eclipse.jetty-jetty-server-
9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-
jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jetty-io-
9.3.11.v20160721,jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.java:273)
jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jetty-io-
9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.SelectChannelEndPoint$2.run(SelectChannelEndPoint.java:93) [org.eclipse.jetty-jetty-io-
9.3.11.v20160721.jar:9.3.11.v20160721] at
org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.executeProduceConsume.java:303) [org.apache.pulsar-functions-
metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.produceConsume(ExecuteProduceConsume.java:148) [org.apache.pulsar-
pulsar-functions-metrics-2.2.0.jar.?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.run(ExecuteProduceConsume.java:136) [org.apache.pulsar-
pulsar-functions-metrics-2.2.0.jar:?] at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1149) [?:1.8.0_171] at
java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:624) [?:1.8.0_171] at
io.netty.util.concurrent.FastThreadLocalRunnable.run(FastThreadLocalRunnable.java:30) [io.netty-netty-all-4.1.22.Final.jar:4.1.22.Final] at
java.lang.Thread.run(Thread.java:748) [?:1.8.0_171] 12:27:31.669 [pulsar-web-53-27] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - -
[07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t6%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-"
 "Python/3.7 aiohttp/3.4.2" 385 12:27:31.669 [pulsar-web-53-31] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST"
https://localhost:8081/admin/v2/persistent/tt1/testns1/t7%5Cmeta/permissions/testrole HTTP/1.1" 500 5652 "-" "Python/3.7 aiohttp/3.4.2" 402 12:27:31.668 [pulsar-web-53-29] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t8%5Cdata/permissions/testrole HTTP/1.1" 500 5652 "-" "Python/3.7 aiohttp/3.4.2" 371 12:27:31.643
https://localhost:8081/admin/v2/persistent/tt1/testns1/t5%5Cmeta/permissions/testrole HTTP/1.1" 204 0 "-" "Python/3.7 aiohttp/3.4.2" 173 12:27:31.642 [pulsar-
web-53-24] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 341
```

15. **title:** Setting topic permission under load

body: #### Expected behavior Do a REST call to admin interface for setting topic permissions like: https://localhost:8081/admin/v2/persistent/tt1/testns1/t4%5Cdata/permissions/testrole body: {'testrole': ['consume', 'produce']} Should work every time and return status 204. #### Actual behavior When this is done with heavy load setting up permission for many topics in parallel. Some will result in the below logged exception and status code 500. #### Steps to reproduce Set up tenant and namespace, then run the set permission for many different topics in that namespace in

```
parallel. I use the same role and actions for all of them. #### System configuration pulsar: 2.2.0 This error was when running the broker in standalone mode in a
docker container supplied on docker hub, with authorisation and authentication via client certs. Have not tested on our full pulsar setup yet. #### Logs
 12:27:31.613 [pulsar-web-53-28] INFO org.apache.pulsar.broker.admin.impl.PersistentTopicsBase - [superUser] Successfully granted access for role testrole:
[produce, consume] - topic persistent://tt1/testns1/t5\meta 12:27:31.587 [pulsar-web-53-30] ERROR org.apache.pulsar.broker.admin.impl.PersistentTopicsBase -
 [superUser] Failed to grant permissions for topic persistent://tt1/testns1/t0\data org.apache.zookeeper.KeeperException$BadVersionException: KeeperErrorCode
 = BadVersion for /admin/policies/tt1/testns1 at org.apache.zookeeper.KeeperException.create(KeeperException.java:118) ~[org.apache.pulsar-pulsar-zookeeper-
2.2.0.jar:2.2.0] at org.apache.zookeeper.KeeperException.create(KeeperException.java:54) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at
org.apache.zookeeper.ZooKeeper.setData(ZooKeeper.java:1336) ~[org.apache.pulsar-pulsar-zookeeper-2.2.0.jar:2.2.0] at org.apache.bookkeeper.zookeeper.ZooKeeperClient.access$3101(ZooKeeperClient.java:70) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
org.apache.bookkeeper.zookeeper.ZooKeeperClient$21.call(ZooKeeperClient.java:1065) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
org.apache.bookkeeper.zookeeper.ZooKeeperClient$21.call(ZooKeeperClient.java:1059) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
org.apache.bookkeeper.zookeeper.ZooWorker.syncCallWithRetries(ZooWorker.java:140) ~[org.apache.bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] at
org.apache.bookkeeper.ZooKeeperClient.setData(ZooKeeperClient.java:1059) \\ \sim [org.apache.bookkeeper-bookkeeper-bookkeeper-server-4.7.2.jar:4.7.2] \\ at 2.5 \\ \sim [org.apache.bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-bookkeeper-boo
org. apache. pulsar. broker. admin. impl. Persistent Topics Base. internal Grant Permissions On Topic (Persistent Topics Base. java: 274) \\ [org. apache. pulsar-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-broker-
2.2.0.jar:2.2.0] at org.apache.pulsar.broker.admin.v2.PersistentTopics.grantPermissionsOnTopic(PersistentTopics.java:107) [org.apache.pulsar-pulsar-broker-
2.2.0.jar:2.2.0] at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method) ~[?:1.8.0_171] at
sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62) ~[?:1.8.0 171] at
sun.reflect. Delegating Method Accessor Impl. invoke (Delegating Method Accessor Impl. java: 43) \sim \cite{Continuous Method Accessor Impl. java: 43)} \sim \cite{Continuous Meth
java.lang.reflect.Method.invoke(Method.java:498) ~[?:1.8.0_171] at
org. glass fish. jersey. server. model. internal. Resource Method Invocation Handler Factory \$1. invoke (Resource Method Invocation Handler Factory. java: \$1)
[org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
org.glassfish.jersey.server.model.internal.AbstractJavaResourceMethodDispatcher$1.run(AbstractJavaResourceMethodDispatcher.java:144)
[org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
org. glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher. invoke (Abstract Java Resource Method Dispatcher. java: 161) and the property of the property of
[org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
org. glass fish. jersey. server. model. internal. Java Resource Method Dispatcher Provider \$VoidOut Invoker. do Dispatch (Java Resource Method Dispatcher Provider. java: 143) in the provider $VoidOut Invoker. do Dispatch (Java Resource Method Dispatcher Provider. java: 143) in the provider $VoidOut Invoker. do Dispatcher Provider. java: 143) in the provider $VoidOut Invoker. do Dispatcher Provider. java: 143) in the provider $VoidOut Invoker. do Dispatcher Provider. java: 143) in the provider $VoidOut Invoker. do Dispatcher Provider. java: 143) in the provider $VoidOut Invoker. do Dispatcher Provider. java: 143) in the provider $VoidOut Invoker. do Dispatcher Provider. java: 143) in the provider $VoidOut Invoker. do Dispatcher Provider. java: 143) in the provider $VoidOut Invoker. do Dispatcher Provider. java: 143) in the provider $VoidOut Invoker. do Dispatcher Provider. java: 143) in the provider $VoidOut Invoker. do Dispatcher Provider $VoidOut Invoker. do Dispatcher Provider. java: 143) in the provider $VoidOut Invoker. do Dispatcher Provider 
[org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
org. glass fish. jersey. server. model. internal. Abstract Java Resource Method Dispatcher. dispatch (Abstract Java Resource Method Dispatcher. java: 99) and the property of the property o
[org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.invoke(ResourceMethodInvoker.java:389)
[org. glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:347)
 [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.model.ResourceMethodInvoker.apply(ResourceMethodInvoker.java:102)
[org.glassfish.jersey.core-jersey-server-2.25.jar:?] at org.glassfish.jersey.server.ServerRuntime$2.run(ServerRuntime.java:326) [org.glassfish.jersey.core-jersey-server.2.5.jar:?] at org.glassfish.jersey.server.ServerRuntime$2.run(ServerRuntime.java:326) [org.glassfish.jersey.core-jersey-server.2.5.jar:?] at org.glassfish.jersey.server.ServerRuntime$2.run(ServerRuntime.java:326) [org.glassfish.jersey.core-jersey-server.2.5.jar:?] at org.glassfish.jersey.server.ServerRuntime$2.run(ServerRuntime.java:326) [org.glassfish.jersey.core-jersey-server.2.5.jar:?] at org.glassfish.jersey.server.ServerRuntime$2.run(ServerRuntime.java:326) [org.glassfish.jersey.server.2.5.jar:?] at org.glassfish.jersey.server.ServerRuntime$2.run(ServerRuntime.java:326) [org.glassfish.jersey.server.2.5.jar:?] at org.glassfish.jersey.server.ServerRuntime$2.run(ServerRuntime.java:326) [org.glassfish.jersey.server.2.5.jar:?] at org.glassfish.jersey.server.ServerRuntime$3.run(ServerRuntime.java:326) [org.glassfish.jersey.server.2.5.jar:?] at org.glassfish.jersey.server.ServerRuntime$3.run(ServerRuntime.java:326) [org.glassfish.jersey.server.2.5.jar:?] at org.glassfish.jersey.server.ServerRuntime$3.run(ServerRuntime.java:326) [org.glassfish.jersey.server.2.5.jar:?] at org.glassfish.jersey.server.ServerRuntime.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.Server.S
server-2.25.jar:?] at org.glassfish.jersey.internal.Errors$1.call(Errors.java:271) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
org.glassfish.jersey.internal.Errors$1.call(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at org.glassfish.jersey.internal.Errors.process(Errors.java:315) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
org. glass fish. jersey. internal. Errors. process (Errors. java: 297) \ [org. glass fish. jersey. core-jersey-common-2.25. jar:?] \ at the process of the
org.glassfish.jersey.internal.Errors.process(Errors.java:267) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
org.glassfish.jersey.process.internal.RequestScope.runInScope(RequestScope.java:317) [org.glassfish.jersey.core-jersey-common-2.25.jar:?] at
org.glassfish.jersey.server.ServerRuntime.process(ServerRuntime.java:305) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
org.glassfish.jersey.server.ApplicationHandler.handle(ApplicationHandler.java:1154) [org.glassfish.jersey.core-jersey-server-2.25.jar:?] at
org, glassfish.jersey.servlet.WebComponent.serviceImpl(WebComponent.java:473) [org, glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
org.glassfish.jersey.servlet.WebComponent.service(WebComponent.java:427) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:388) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
org.glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:341) [org.glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
org, glassfish.jersey.servlet.ServletContainer.service(ServletContainer.java:228) [org, glassfish.jersey.containers-jersey-container-servlet-core-2.25.jar:?] at
org.eclipse.jetty.servlet.ServletHolder.handle(ServletHolder.java:845) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1689) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
at org.apache.pulsar.broker.web.ResponseHandlerFilter.doFilter(ResponseHandlerFilter.java:53) [org.apache.pulsar-pulsar-broker-2.2.0.jar:2.2.0] at
org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1676) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
at org.apache.pulsar.broker.web.AuthenticationFilter.doFilter.duthenticationFilter.java:74) [org.apache.pulsar-pulsar-broker-common-2.2.0.jar:2.2.0] at
org.eclipse.jetty.servlet.ServletHandler$CachedChain.doFilter(ServletHandler.java:1676) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721]
at org.eclipse.jetty.servlet.ServletHandler.doHandle(ServletHandler.java:581) [org.eclipse.jetty-jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
org.eclipse.jetty.server.session.SessionHandler.doHandle(SessionHandler.java:224) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
org.eclipse.jetty.server.handler.ContextHandler.doHandle(ContextHandler.java:1180) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
org.eclipse.jetty.servlet.ServletHandler.doScope(ServletHandler.java:511) [org.eclipse.jetty-jetty-servlet-9.3.11.v20160721.jar:9.3.11.v20160721] at
org.eclipse.jetty.server.session.SessionHandler.doScope(SessionHandler.java:185) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar;9.3.11.v20160721] at
org.eclipse.jetty.server.handler.ContextHandler.doScope(ContextHandler.java:1112) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
org.eclipse.jetty.server.handler.ScopedHandler.handle(ScopedHandler.java:141) [org.eclipse.jetty-jetty-server-9.3.11.v20160721.jar:9.3.11.v20160721] at
org.eclipse.jetty.server.handler.ContextHandlerCollection.handle(ContextHandlerCollection.java:213) [org.eclipse.jetty-jetty-server-
9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerCollection.handle(HandlerCollection.java:119) [org.eclipse.jetty-jetty-server-
9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.handler.HandlerWrapper.handle(HandlerWrapper.java:134) [org.eclipse.jetty-jetty-server-
9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.Server.handle(Server.java:524) [org.eclipse.jetty-jetty-server-
9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpChannel.handle(HttpChannel.java:319) [org.eclipse.jetty-jetty-server-
9.3.11.v20160721, jar:9.3.11.v20160721] at org.eclipse.jetty.server.HttpConnection.onFillable(HttpConnection.java:253) [org.eclipse.jetty-jetty-server-
9.3.11.v20160721.jar; 9.3.11.v20160721] \ at org. eclipse.jetty. io. Abstract Connection \$ Read Callback. succeeded (Abstract Connection.java: 273) \ [org. eclipse.jetty-io. Abstract Connection.java: 273] \ [org. eclipse
9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.jo.ssl.SslConnection.onFillable(SslConnection.java:202) [org.eclipse.jetty-jetty-jo-
9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.AbstractConnection$ReadCallback.succeeded(AbstractConnection.java:273) [org.eclipse.jetty-io.AbstractConnection.specific properties of the content of the
jetty-io-9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.io.FillInterest.fillable(FillInterest.java:95) [org.eclipse.jetty-jo-
9.3.11.v20160721.jar:9.3.11.v20160721] at org.eclipse.jetty.jo.SelectChannelEndPoint$2.run(SelectChannelEndPoint.java:93) [org.eclipse.jetty-jetty-jo-
9.3.11.v20160721.jar:9.3.11.v20160721] at
org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.executeProduceConsume(ExecuteProduceConsume.java:303) [org.apache.pulsar-functions-
metrics - 2.2.0.jar:?] \ at \ org. eclipse.jetty.util.thread.strategy. Execute Produce Consume.produce Consume (Execute Produce Consume.java: 148) \ [org. apache.pulsar-produce Consume.produce Consume.java: 148) \ [org. apache.pulsar-produce Consume.java: 148] \ [org. apache.puls
pulsar-functions-metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.run(ExecuteProduceConsume.java:136) [org.apache.pulsar-functions-metrics-2.2.0.jar:?] at org.eclipse.jetty.util.thread.strategy.ExecuteProduceConsume.java:136)
pulsar-functions-metrics-2.2.0.jar:?] at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1149) [?:1.8.0_171] at
java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:624) [?:1.8.0 171] at
io.netty.util.concurrent.FastThreadLocalRunnable.run(FastThreadLocalRunnable.java:30) [io.netty-netty-all-4.1.22.Final.jar:4.1.22.Final] at
java.lang.Thread.run(Thread.java:748) [?:1.8.0_171] 12:27:31.669 [pulsar-web-53-27] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - -
[07/Nov/2018:12:27:31\ +0000]\ "POST\ https://localhost:8081/admin/v2/persistent/tt1/testns1/t6\%5Cdata/permissions/testrole\ HTTP/1.1"\ 500\ 6238\ "-" the strong of the
"Python/3.7 aiohttp/3.4.2" 385 12:27:31.669 [pulsar-web-53-31] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t7%5Cmeta/permissions/testrole HTTP/1.1" 500 5652 "-" "Python/3.7 aiohttp/3.4.2" 402 12:27:31.668 [pulsar-web-53-29] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST https://localhost:8081/admin/v2/persistent/tt1/testns1/t8%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 371 12:27:31.643
[pulsar-web-53-28] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST
https://localhost:8081/admin/v2/persistent/tt1/testns1/t5%5Cmeta/permissions/testrole HTTP/1.1" 204 0 "-" "Python/3.7 aiohttp/3.4.2" 173 12:27:31.642 [pulsar-
web-53-24] INFO org.eclipse.jetty.server.RequestLog - 172.17.0.1 - - [07/Nov/2018:12:27:31 +0000] "POST
https://localhost:8081/admin/v2/persistent/t1/testns1/t4%5Cdata/permissions/testrole HTTP/1.1" 500 6238 "-" "Python/3.7 aiohttp/3.4.2" 341
```

github_issues_comments:

- 1. Now verified same issue on a full Pulsar setup.
- 2. I think the problem might be related to concurrent updates on namespace policy. we can probably handle the bad version and retry, or put all the updates on same namespace in ordered executor.
- 3. Yes, the zookeeper bad version implies that pulsar have concurrent updates. At least a retry is needed. Don't know if a queue would help, do you only have one entry point? Otherwise, you would still have potential concurrent updates. Harald
- 4. Hi, Just a comment is it not normal to give status service unavailable 503, for a retry scenario. Status conflict implies that the client has sent a faulty request, which is not the case, and sometimes it could be hard to distinguish this conflict from an actual conflict, and a need to still parse response text. Or is this zookeeper conflict handled inside pulsar with a retry. Harald On Fri, 28 Dec 2018, 19:15 Sijie Guo <notifications@github.com wrote: > Closed #2952 <https://github.com/apache/pulsar/issues/2952> via 1fa81ca > https://github.com/apache/pulsar/commit/1fa81ca54f688938c83a0be3c98bebc7589be668>>.> https://github.com/apache/pulsar/issues/2952#event-2047561931, or mute > the thread > https://github.com/notifications/unsubscribe-auth/ADKqXSU-BC9QxLxFu9KkippUfPNwcDxzks5u9l_dgaJpZM4YSXhe>>.>
- 5. **body:** @HaraldGustafsson At the time of bad version happening, it means there are concurrent updates to namespace policy. It is hard to determine what is the real conflict and what conflict it is. so returning CONFLICT status code sounds a right approach to me. IMO, Pulsar applications which are using pulsar admin api should be able to catch this exception and retries, because pulsar applications are better places to resolve the conflict. Does that align with what you are thinking?

label: code-design

- 6. I understand the reasoning, but from the api it is not obvious that when you change permissions on different topics in the same namespace that you could get this concurrent conflict (and should retry), if you don't know that all topics permissions are stored in the namespace. At least I did not know it before digging a bit deeper. When realising this I needed to queue such operations on the client side and add retry since multiple workers might attempt to do changes. So when setting up many topics, with several configurations like retention, ttl, permissions, etc, they all need to be queued, and get rtt delay. In my setup, for each admin request we get we need to queue around 10 admin requests to pulsar, with retries even more. Would it be possible to introduce a larger namespace policy update method to change multiple things simultaneously, since in my case the conflict was often due to changing several things in the ns policy. On Fri, 28 Dec 2018, 19:49 Sijie Guo <notifications@github.com wrote: >@HaraldGustafsson https://github.com/HaraldGustafsson At the time of > bad version happening, it means there are concurrent updates to namespace > policy. It is hard to determine what is the real conflict and what conflict > it is. so returning CONFLICT status code sounds a right approach to me. > IMO, Pulsar applications which are using pulsar admin api should be able to > catch this exception and retries, because pulsar applications are better > places to resolve the conflict. Does that align with what you are thinking? >> â€" > You are receiving this because you were mentioned. > Reply to this email directly, view it on GitHub > https://github.com/apache/pulsar/issues/2952#issuecomment-450408555>, or mute > the thread > >. >
- 7. @HaraldGustafsson I see your point now. Let me reopen this issue and think through a better solution on addressing such conflicts.
- 8. @HaraldGustafsson for my point of view, **retry** could not a good solution, due to retry also could fail again. Maybe a queue/or only one request at one time is a better idea, what I know for kafka-manager to change policy does like this . @sijie what do you think about this?
- 9. @foreversunyao > Maybe a queue/or only one request at one time is a better idea, what I know for kafka-manager to change policy does like this . I was thinking about same thing. that sgtm
- 10. @sijie I'll try to add one global write lock for this request first, I think it could be enough for change policy.
- 11. @foreversunyao sgtm
- 12. @sijie for this issue, I am considering create a persistent zknode in zk if not exists, zknode name is the namespace name. by this way to implement a lock for change permission. But I have a problem which path I should use, what do you think about this? current path: [zookeeper, counters, ledgers, managed-ledgers, schemas, namespace, admin, loadbalance]
- 13. @HaraldGustafsson @sijie @merlimat , Hi, I made a pr https://github.com/apache/pulsar/pull/3398/ for this issue , tried to add a zknode for mutex(to be honest, it's only a short way like queue size is one, could not a best way). Right now, what I think we could have 2 other ways to do **retry** thing except this one: -1, use zk sequential node for a queue to do retry , could be smarter to do retry but more logics in code , like check the sequence of request. 2, use simple retry like sleep a while and retry until the timeout , but cant guarantee grant order is same as the request order . any ideas ? thanks

github_pulls:

- 1. **title:** catch bad version in persistentopic, make its behavior same as namespace **body:** ### Motivation try to solve issue #2952, and make topic's behavior same as [Namespaces.java](https://github.com/apache/pulsar/blob/master/pulsar-broker/src/main/java/org/apache/pulsar/broker/admin/impl/NamespacesBase.java) ### Modifications PersistentTopicsBase.java ### Result After your change, what will change
- 2. **title:** catch bad version in persistentopic, make its behavior same as namespace **body:** ### Motivation try to solve issue #2952, and make topic's behavior same as [Namespaces.java](https://github.com/apache/pulsar/blob/master/pulsar-broker/src/main/java/org/apache/pulsar/broker/admin/impl/NamespacesBase.java) ### Modifications PersistentTopicsBase.java ### Result After your change, what will change.

github_pulls_comments:
github_pulls_reviews:
jira_issues:
jira_issues_comments: