**Introduction**: This document explains how to test ETT XDR Test cases by using simple java program and certs shared by ETT.

**Your system as Sender Test case execution instructions:**

**Step 1**: Extract keyAndCert.zip (attached in the email) to C:\Projects\NIST. This Zip has all the certs shared by ETT and trust store that contains ETT public key.

**Step 2**: Import Mutual-TLS maven project to eclipse. MutualTLSSender.java has code to test XDR test case 6 and 7.

**Step 3**: Open MutualTLSSender.java file, update line number 26 with right ETT endpoint as per the test case, right click and execute run as java application option. Below are the endpoints for Test case 6 and 7.

Test case 6: <https://hit-dev.nist.gov:11084/xdstools3/sim/ett/6/docrec/prb>

Test Case 7: <https://edge.nist.gov:12084>

**Step 4**: Check the console output, you should able to see detailed logs that explained mutual SSL authentication.

**Note**: For Test case 6 you may find some exception at the end of the console output, the reason for that is end point in Test case 6 is Post endpoint.

If you facing any file not found exceptions in regards with keystore and trust store locations, please make sure keystore and trsutstore locations are correct in MutualTLSSender.java file (line number 17 and 18).

**Your system as Receiver Test case execution:**

Since XDR test cases 8 and 9 is socket level TLS handshake testing, we have created amazon ec2 instance, installed tomcat and enabled SSL port on 8443 by using the certificates that are shared by ETT. In this scenario amazon ec2 instance will act as SUT and 52.91.99.59 is the IP address of Amazon ec2 instance.

Step 1: Go to <https://edge.nist.gov/ett/#/edge/xdr> and click on “Your system as: Receiver button”.

Step 2: Go to XDR Test 8, enter 52.91.99.59 as IP address, 8443 as port number and hit RUN button. You should see success result.

Step 3: Go to XDR Test 9, enter 52.91.99.59 as IP address, 8443 as port number and hit RUN button. You should see success result.