A summary of certificate names, their locations, and modified files

Here's a brief document summarizing the certificate names, their locations, and the modified files for the Mosquitto project:

Certificate Names and Locations on the Rule Host

- 1. Root Certificate:
 - o Certificate Name: root.crt
 - o **Location**: /usr/local/etc/mosquito/certs
- 2. Client Certificate:
 - o Certificate Name: IntCert.crt
 - o Location: /usr/local/etc/mosquito/certs
- 3. Client Key:
 - o **Key Name**: intcert.key
 - o Location: /usr/local/etc/mosquito/keys

List of Modified Files

- 1. Mosquitto Configuration File:
 - o File Path: /usr/local/etc/mosquitto/mosquitto.conf
 - o Modifications Made:
 - Added TLS listener on port 8883.
 - Specified paths for certfile and keyfile:
 - certfile /usr/local/etc/mosquito/certs/IntCert.crt
 - keyfile /usr/local/etc/mosquito/keys /intcert.key
 - Enabled client certificate verification with require_certificate true for secure authentication.
 - Set TLS version to tlsv1.1.
- 2. Password File:
 - o File Path: /usr/local/etc/mosquitto/pwfile
 - o Modifications Made:
 - Added username (abid) and hashed password for secure access to the MQTT server.
- 3. Access Control List (ACL) File:
 - o File Path: /usr/local/etc/mosquitto/aclfile
 - o Modifications Made:
 - Configured access control to allow users to publish/subscribe based on username.

Summary of Actions Taken

- Created and configured a root and client certificate for secure communication.
- Modified mosquitto.conf to enable TLS, specify certificate locations, enforce client certificate verification, and configure user authentication.
- Restarted the Mosquitto service to apply all changes, ensuring that the secure configuration is active.