

Implementation PDF (continued...)

4) AWS subscribe-publish sample

```
tejashree@tejashree-Lenovo-G50-70: ~/Zephyr_AWS_Iot_SDK-master/samples/net/aws-iot-device-sdk-embedded-C-master/samples/linux/subscribe_pu
issued on      : 2017-10-12 00:00:00
expires on    : 2018-10-13 23:59:59
signed using  : ECDSA with SHA256
EC key size   : 256 bits
basic constraints : CA=false
subject alt name : iot.us-east-2.amazonaws.com, *.iot.us-east-2.amazonaws.com
key usage     : Digital Signature
ext key usage  : TLS Web Server Authentication, TLS Web Client Authentication

Subscribing...
-->sleep
Subscribe callback
sdkTest/sub   hello from SDK QOS0 : 0
Subscribe callback
sdkTest/sub   hello from SDK QOS1 : 1
-->sleep
Subscribe callback
sdkTest/sub   hello from SDK QOS0 : 2
Subscribe callback
sdkTest/sub   hello from SDK QOS1 : 3
-->sleep
Subscribe callback
sdkTest/sub   hello from SDK QOS0 : 4
Subscribe callback
sdkTest/sub   hello from SDK QOS1 : 5
-->sleep
Subscribe callback
sdkTest/sub   hello from SDK QOS0 : 6
Subscribe callback
sdkTest/sub   hello from SDK QOS1 : 7
-->sleep
Subscribe callback
sdkTest/sub   hello from SDK QOS0 : 8
Subscribe callback
sdkTest/sub   hello from SDK QOS1 : 9
-->sleep
Subscribe callback
sdkTest/sub   hello from SDK QOS0 : 10
Subscribe callback
sdkTest/sub   hello from SDK QOS1 : 11
-->sleep
```

```
tejashree@tejashree-Lenovo-G50-70: ~/Zephyr_AWS_Iot_SDK-master/samples/net/aws-iot-device-sdk-embedded-C-master/samples/linux/subscribe_pu
tejashree@tejashree-Lenovo-G50-70:~/Zephyr_AWS_Iot_SDK-master/samples/net/aws-iot-device-sdk-embedded-C-master/samples/linux/subscribe_publish_
sample$ make -f Makefile
make -C ../../external_libs/mbedtls
make[1]: Entering directory '/home/tejashree/Zephyr_AWS_Iot_SDK-master/samples/net/aws-iot-device-sdk-embedded-C-master/external_libs/mbedtls'
make[2]: Entering directory '/home/tejashree/Zephyr_AWS_Iot_SDK-master/samples/net/aws-iot-device-sdk-embedded-C-master/external_libs/mbedtls'
make[2]: Leaving directory '/home/tejashree/Zephyr_AWS_Iot_SDK-master/samples/net/aws-iot-device-sdk-embedded-C-master/external_libs/mbedtls'
make[1]: Leaving directory '/home/tejashree/Zephyr_AWS_Iot_SDK-master/samples/net/aws-iot-device-sdk-embedded-C-master/external_libs/mbedtls'
In file included from subscribe_publish_sample.c:36:0:
subscribe_publish_sample.c: In function 'iot_subscribe_callback_handler':
subscribe_publish_sample.c:65:11: warning: format '%s' expects argument of type 'char *', but argument 5 has type 'void *' [-Wformat=]
  IOT_INFO("%s\t%s", topicNameLen, topicName, (int) params->payloadLen, params->payload);
          ^
../../include/aws_iot_log.h:88:9: note: in definition of macro 'IOT_INFO'
  printf(__VA_ARGS__); \
  ~~~~~^
tejashree@tejashree-Lenovo-G50-70:~/Zephyr_AWS_Iot_SDK-master/samples/net/aws-iot-device-sdk-embedded-C-master/samples/linux/subscribe_publish_
sample$ ls
aws_iot_config.h  Makefile  subscribe_publish_sample  subscribe_publish_sample.c
tejashree@tejashree-Lenovo-G50-70:~/Zephyr_AWS_Iot_SDK-master/samples/net/aws-iot-device-sdk-embedded-C-master/samples/linux/subscribe_publish_
sample$ ./subscribe_publish_sample

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DEBUG:  main L#158 rootCA /home/tejashree/Zephyr_AWS_Iot_SDK-master/samples/net/aws-iot-device-sdk-embedded-C-master/samples/linux/subscribe_p
ublish_sample/../../../../certs/rootCA.crt
DEBUG:  main L#159 clientCRT /home/tejashree/Zephyr_AWS_Iot_SDK-master/samples/net/aws-iot-device-sdk-embedded-C-master/samples/linux/subscrib
e_publish_sample/../../../../certs/RaspberryPi.cert.pem
DEBUG:  main L#160 clientKey /home/tejashree/Zephyr_AWS_Iot_SDK-master/samples/net/aws-iot-device-sdk-embedded-C-master/samples/linux/subscrib
e_publish_sample/../../../../certs/RaspberryPi.private.key
Connecting...
DEBUG:  iot_tls_connect L#120
. Seeding the random number generator...
DEBUG:  iot_tls_connect L#128 . Loading the CA root certificate ...
DEBUG:  iot_tls_connect L#134 ok (0 skipped)
DEBUG:  iot_tls_connect L#136 . Loading the client cert. and key...
DEBUG:  iot_tls_connect L#149 ok
DEBUG:  iot_tls_connect L#151 . Connecting to a28z0eh8rmhoam.iot.us-east-2.amazonaws.com/8883...
DEBUG:  iot_tls_connect L#170 ok
DEBUG:  iot_tls_connect L#172 . Setting up the SSL/TLS structure...
DEBUG:  iot_tls_connect L#204
```

5) Shadow sample

```
tejashree@tejashree-Lenovo-G50-70: ~/Zephyr_AWS_IoT_SDK-master/samples/net/aws-iot-device-sdk-embedded-C-master/samples/linux/shadow_sample$ make
make -C ../../../../external_libs/mbedtls
make[1]: Entering directory '/home/tejashree/Zephyr_AWS_IoT_SDK-master/samples/net/aws-iot-device-sdk-embedded-C-master/external_libs/mbedtls'
make[2]: Entering directory '/home/tejashree/Zephyr_AWS_IoT_SDK-master/samples/net/aws-iot-device-sdk-embedded-C-master/external_libs/mbedtls'
make[2]: Leaving directory '/home/tejashree/Zephyr_AWS_IoT_SDK-master/samples/net/aws-iot-device-sdk-embedded-C-master/external_libs/mbedtls'
make[1]: Leaving directory '/home/tejashree/Zephyr_AWS_IoT_SDK-master/samples/net/aws-iot-device-sdk-embedded-C-master/external_libs/mbedtls'
tejashree@tejashree-Lenovo-G50-70:~/Zephyr_AWS_IoT_SDK-master/samples/net/aws-iot-device-sdk-embedded-C-master/samples/linux/shadow_sample$ ./shadow_sample

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DEBUG:  main L#176 rootCA /home/tejashree/Zephyr_AWS_IoT_SDK-master/samples/net/aws-iot-device-sdk-embedded-C-master/samples/linux/shadow_sample/../../../../certs/rootCA.crt
DEBUG:  main L#177 clientCRT /home/tejashree/Zephyr_AWS_IoT_SDK-master/samples/net/aws-iot-device-sdk-embedded-C-master/samples/linux/shadow_sample/../../../../certs/RaspberryPi.cert.pem
DEBUG:  main L#178 clientKey /home/tejashree/Zephyr_AWS_IoT_SDK-master/samples/net/aws-iot-device-sdk-embedded-C-master/samples/linux/shadow_sample/../../../../certs/RaspberryPi.private.key
Shadow Init
Shadow Connect
DEBUG:  iot_tls_connect L#120
        . Seeding The random number generator...
DEBUG:  iot_tls_connect L#128      . Loading the CA root certificate ...
DEBUG:  iot_tls_connect L#134      ok (0 skipped)
DEBUG:  iot_tls_connect L#136      . Loading the client cert. and key...
DEBUG:  iot_tls_connect L#149      ok
DEBUG:  iot_tls_connect L#151      . Connecting to a28z0eh8rmoan.iot.us-east-2.amazonaws.com/8883...
DEBUG:  iot_tls_connect L#170      ok
DEBUG:  iot_tls_connect L#172      . Setting up the SSL/TLS structure...
DEBUG:  iot_tls_connect L#204
SSL state connect : 0
DEBUG:  iot_tls_connect L#207      ok
DEBUG:  iot_tls_connect L#209
SSL state connect : 0
DEBUG:  iot_tls_connect L#210      . Performing the SSL/TLS handshake...
DEBUG:  _iot_tls_verify_cert L#41
```

```
tejashree@tejashree-Lenovo-G50-70: ~/Zephyr_AWS_IoT_SDK-master/samples/net/aws-iot-device-sdk-embedded-C-master/samples/linux/shadow_sample$ ./shadow_sample
=====
On Device: window state false
Update Shadow: {"state":{"reported":{"temperature":25.500000,"windowOpen":false}}, "clientToken":"RaspberryPi-0"}
*****
Update Accepted !!
=====
On Device: window state false
Update Shadow: {"state":{"reported":{"temperature":26.000000,"windowOpen":false}}, "clientToken":"RaspberryPi-1"}
*****
Update Accepted !!
=====
On Device: window state false
Update Shadow: {"state":{"reported":{"temperature":26.500000,"windowOpen":false}}, "clientToken":"RaspberryPi-2"}
*****
Update Accepted !!
=====
On Device: window state false
Update Shadow: {"state":{"reported":{"temperature":27.000000,"windowOpen":false}}, "clientToken":"RaspberryPi-3"}
*****
Update Accepted !!
=====
On Device: window state false
Update Shadow: {"state":{"reported":{"temperature":27.500000,"windowOpen":false}}, "clientToken":"RaspberryPi-4"}
*****
Update Accepted !!
=====
```