02.03. TSM (SCP)

연결 정보

항목		내용
TSM Proxy		
	dev	http://10.20.30.41:2011/TSM_PROXY
	Swagger	http://10.20.30.41:2011/TSM_PROXY/swagger-ui.html 발급: /device/issueappletwithpersodata
AWS MQTT endpoint		a34vuzhubahjfj-ats.iot.ap-northeast-2.amazonaws.com / port: 8883
MQTT		임시..
	키 & 인증서 (+csr)	test.zip
	AWS 정책	policy-ee2e9203f0a0971c599888fb8b67e3a1882626cd-1747200329
	topic	client/test/ee2e9203f0a0971c599888fb8b67e3a1882626cd/la/123456
	client id	ee2e9203f0a0971c599888fb8b67e3a1882626cd-*

개발 설정

- [ ] ~~TSM용 AWS Gateway API 생성~~
  - ~~Authorizer 생성: username, iot_id 반환~~

~~AWS IoT lambda를 그대로 사용하기 위해서, 모나 토큰이 필요한 gateway를 대신할 용도~~

TSM에서는 AWS SDK 직접 호출

- [x] AWS IAM에 TSM UI에서 사용할 user 생성

인증서 정보 조회를 위한 유저 설정: tsm

- [x] SE와 인증서 정보를 매칭할 DB 테이블 추가

TSE_SE_CERT

```
CREATE TABLE `TSE_SE_CERT` (
  `ID` bigint NOT NULL AUTO_INCREMENT,
  `SEID` varchar(256) NOT NULL,
  `AID` varchar(32) DEFAULT NULL,
  `AWS_CERT_ID` varchar(70) DEFAULT NULL,
  `START_TMPST` datetime(6) DEFAULT NULL
COMMENT 'certificate valid date',
  `END_TMPST` datetime(6) DEFAULT NULL COMMENT
'certificate valid date',
  `REG_TMPST` datetime(6) NOT NULL,
  `UPD_TMPST` datetime(6) NOT NULL,
  PRIMARY KEY (`ID`),
  UNIQUE KEY `TSE_SE_CERT_UNIQUE` (`SEID`,
`AWS_CERT_ID`,`AID`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4
COLLATE=utf8mb4_0900_ai_ci;
```

- [x] 임시 인증서, 정책 설정

인증서, 정책 생성 및 mqtt 연결 확인

```
# private key, csr
openssl req -new -newkey rsa:2048 -nodes -
keyout test.key -out test.csr

# private key public key
openssl rsa -in test.key -pubout -out test.pub

# aws   with csr
aws iot create-certificate-from-csr --
certificate-signing-request=file://test.csr --
set-as-active --certificate-pem-outfile test.
pem --region ap-northeast-2
# arn:aws:iot:ap-northeast-2:867344438718:cert
/d86d738a651ed6f563e9ec3063b6b8b8fb4039c945433d
f1d13da3e90f681bac

#   : policy-{username-hash}-
aws iot create-policy --policy-name policy-
ee2e9203f0a0971c599888fb8b67e3a1882626cd-$(date
+%s) --policy-document=file://policy.json
# policy-
ee2e9203f0a0971c599888fb8b67e3a1882626cd-
1747200329

#
aws iot attach-policy --policy-name policy-
ee2e9203f0a0971c599888fb8b67e3a1882626cd-
1747200329 --target arn:aws:iot:ap-northeast-2:
867344438718:cert
```

```
/d86d738a651ed6f563e9ec3063b6b8b8fb4039c945433d
f1d13da3e90f681bac

# ee2e9203f0a0971c599888fb8b67e3a1882626cd :
KONAI com id = 2A831A8CE068
# ee2e9203f0a0971c599888fb8b67e3a1882626cd/la
/123456

# MQTT subscribe
mosquitto_sub -h a34vuzhubahjfj-ats.iot.ap-
northeast-2.amazonaws.com -p 8883 \
--cafile ./root-CA.crt --key ./test.key --cert
./test.pem \
-t "client/test
/ee2e9203f0a0971c599888fb8b67e3a1882626cd/la
/123456" \
-d \
-i ee2e9203f0a0971c599888fb8b67e3a1882626cd-
test

# MQTT publish
mosquitto_pub -h a34vuzhubahjfj-ats.iot.ap-
northeast-2.amazonaws.com -p 8883 \
--cafile ./root-CA.crt --key ./test.key --cert
./test.pem \
-t "client/test
/ee2e9203f0a0971c599888fb8b67e3a1882626cd/la
/123456" \
-i ee2e9203f0a0971c599888fb8b67e3a1882626cd-
pub \
-d \
-m '{"msg": "hello world"}'
```

시연 사전 작업

순서	내용	비고
1	TSM 준비	05. TSM USIM 발급 참고

TSM 서비스 정보

Key	Value
AID	
Service ID	
Service Version	1.0.0

참고

05. TSM USIM 발급