



Taiwan Testing and Certification Center

Information and Communication Technology Service Lab.

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Test Report No : 21-07-CAV-002-01

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Taiwan Testing and Certification Center

## OpenADR Test Report

**Product Name : iEN**

**Date : 2022/01/21**





Taiwan Testing and Certification Center

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**1. Test Report Summary**

Test Report No		21-07-CAV-002-01
Test specification		<ul style="list-style-type: none"> <li>• OpenADR 2.0a Certification Test Specification Version 1.1.2</li> <li>• OpenADR 2.0b Certification Test Specification Version 1.1.2</li> </ul>
Client Name		Chunghwa Telecom Co., Ltd.
Client Address		No.21-3, Sec. 1, Xinyi Rd., Zhongzheng Dist., Taipei City 100, Taiwan
DUT Information	Product Name	iEN
	Product Model Number	iEN
	Product Type	<input type="checkbox"/> VTN <input checked="" type="checkbox"/> VEN
	Hardware Version	na
	Firmware Version	1.0
	OpenADR Profile	<input type="checkbox"/> 2.0a <input checked="" type="checkbox"/> 2.0b
	Security	<input type="checkbox"/> ECC <input checked="" type="checkbox"/> RSA
	Transport Protocol	<input checked="" type="checkbox"/> Simple HTTP <input type="checkbox"/> XMPP
	Pull and Push Mode	<input checked="" type="checkbox"/> Pull Mode <input type="checkbox"/> Push Mode
Test result		<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL <input type="checkbox"/> Inconclusive_____
Date of Sample Receipt		2021/10/27
Date of Testing Start		2021/10/29
Date of Issue		2022/01/21
Testing Laboratory		Taiwan Testing and Certification Center
Note		This test report only relates to the test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts.

Test by:	Reviewed by	Approved by :
		

## 2. Test Environment

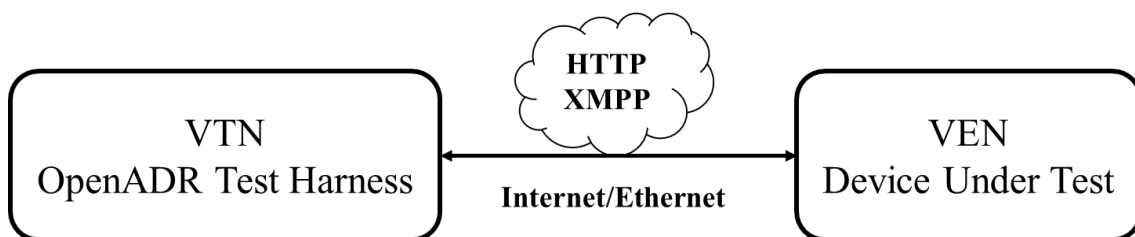
### 2.1 Testing Laboratory

- Lab name: Taiwan Testing and Certification Center  
Information and Communication Technology Service Lab.
- Address: No.8, Ln. 29, Wenming Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)

### 2.2 Test Equipment

- OpenADR 2.0 A & B Test Harness
  - QualityLogic OpenADR2.0aCertTest - v1.1.5
  - QualityLogic OpenADR2.0bCertTest - v1.1.5

### 2.3 Test Setup



### 3. Test Results Summary

#### 3.1 Summary Test Result

<b>DUT Test Profile:</b>
<b>2.0b VEN Pull Mode Tests: Passed</b>

#### 3.2 Test Result Date Table

Table 1 、 Pull Mode Test Result

No.	Test Case Name	Result	Log
<b>EiRegisterParty Service Test Scenarios</b>			
01	N1_0010_TH_VTN_1	PASS	TraceLog_102921_182458_303.txt
02	N1_0015_TH_VTN_1	PASS	TraceLog_121321_164158_541.txt
03	N1_0020_TH_VTN_1	PASS	TraceLog_011422_190608_343.txt
04	N1_0025_TH_VTN_1	PASS	TraceLog_102921_185232_287.txt
05	N1_0030_TH_VTN_1	PASS	TraceLog_102921_185614_785.txt
06	N1_0040_TH_VTN_1	PASS	TraceLog_102921_184837_572.txt
07	N1_0050_TH_VTN_1	PASS	TraceLog_102921_183340_416.txt
08	N1_0060_TH_VTN_1	PASS	TraceLog_102921_183622_195.txt
09	N1_0065_TH_VTN_1	PASS	TraceLog_102921_183827_429.txt
10	N1_0070_TH_VTN_1	PASS	TraceLog_102921_184114_668.txt
11	N1_0080_TH_VTN_1	NA	TraceLog_102921_184536_223.txt
<b>EiOpt Service Test Scenarios</b>			
01	P1_2010_TH_VTN_1	PASS	TraceLog_102921_190040_917.txt
02	P1_2015_TH_VTN_1	PASS	TraceLog_102921_190839_531.txt
03	P1_2020_TH_VTN_1	PASS	TraceLog_102921_190611_813.txt
04	P1_2030_TH_VTN_1	PASS	TraceLog_120121_183120_932.txt
05	P1_2040_TH_VTN_1	PASS	TraceLog_102921_191621_824.txt
06	P1_2050_TH_VTN_1	NA	TraceLog_102921_191610_025.txt
<b>EiReport Service Test Scenarios</b>			
01	R1_3010_TH_VTN_1	PASS	TraceLog_011222_142216_538.txt
02	R1_3020_TH_VTN_1	PASS	TraceLog_011222_142449_050.txt
03	R1_3025_TH_VTN_1	PASS	TraceLog_011222_140410_707.txt
04	R1_3027_TH_VTN_1	PASS	TraceLog_011222_140830_778.txt
05	R1_3030_TH_VTN_1	PASS	TraceLog_011222_141449_228.txt
06	R1_3040_TH_VTN_1	PASS	TraceLog_011222_141816_330.txt
07	R1_3045_TH_VTN_1	PASS	TraceLog_011222_142004_613.txt
08	R1_3050_TH_VTN_1	SKIP	
09	R1_3060_TH_VTN_1	SKIP	
10	R1_3070_TH_VTN_1	SKIP	
11	R1_3080_TH_VTN_1	SKIP	
12	R1_3090_TH_VTN_1	SKIP	
13	R1_3100_TH_VTN_1	SKIP	
14	R1_3120_TH_VTN_1	SKIP	
15	R1_3130_TH_VTN_1	SKIP	
16	R1_3150_TH_VTN_1	PASS	TraceLog_011222_143315_665.txt
17	R1_3160_TH_VTN_1	PASS	TraceLog_011222_143507_889.txt

18	R1_3170_TH_VTN_1	PASS	TraceLog_011422_181528_646.txt
19	R1_3180_TH_VTN_1	PASS	TraceLog_011222_145013_804.txt
20	R1_3190_TH_VTN_1	PASS	TraceLog_011222_145120_096.txt
<b>EiEvent Service Test Scenarios</b>			
01	E1_1010_TH_VTN_1	PASS	TraceLog_110421_195031_224.txt
02	E1_1020_TH_VTN_1	PASS	TraceLog_110421_195150_195.txt
03	E1_1025_TH_VTN_1	PASS	TraceLog_110421_195321_838.txt
04	E1_1027_TH_VTN_1	PASS	TraceLog_110421_195450_940.txt
05	E1_1030_TH_VTN_1	PASS	TraceLog_110421_195612_458.txt
06	E1_1040_TH_VTN_1	PASS	TraceLog_110421_195758_368.txt
07	E1_1050_TH_VTN_1	PASS	TraceLog_121321_164406_383.txt
08	E1_1055_TH_VTN_1	PASS	TraceLog_110421_200715_591.txt
09	E1_1060_TH_VTN_1	PASS	TraceLog_121321_170448_801.txt
10	E1_1065_TH_VTN_1	NA	TraceLog_110421_201130_077.txt
11	E1_1070_TH_VTN_1	PASS	TraceLog_110421_201154_051.txt
12	E1_1080_TH_VTN_1	PASS	TraceLog_110421_201242_589.txt
13	E1_1090_TH_VTN_1	PASS	TraceLog_120121_191144_831.txt
<b>EiEvent Ported A Profile Test Cases</b>			
01	A_E1_0020_TH_VTN_1	PASS	TraceLog_122321_121940_088.txt
02	A_E1_0040_TH_VTN_1	PASS	TraceLog_110421_201942_846.txt
03	A_E1_0060_TH_VTN_1	PASS	TraceLog_110421_202146_944.txt
04	A_E1_0070_TH_VTN_1	PASS	TraceLog_110421_202255_201.txt
05	A_E1_0082_TH_VTN_1	PASS	TraceLog_110421_202552_739.txt
06	A_E1_0086_TH_VTN_1	PASS	TraceLog_110421_202652_304.txt
07	A_E1_0090_TH_VTN_1	PASS	TraceLog_110421_202804_269.txt
08	A_E1_0092_TH_VTN_1	PASS	TraceLog_120121_191435_061.txt
09	A_E1_0094_TH_VTN_1	PASS	TraceLog_121321_172407_443.txt
10	A_E1_0096_TH_VTN_1	PASS	TraceLog_121321_172640_779.txt
11	A_E1_0098_TH_VTN_1	PASS	TraceLog_121321_172804_886.txt
12	A_E1_0100_TH_VTN_1	PASS	TraceLog_121321_172909_986.txt
13	A_E1_0102_TH_VTN_1	PASS	TraceLog_121321_173033_260.txt
14	A_E1_0104_TH_VTN_1	PASS	TraceLog_121321_173151_413.txt
15	A_E1_0110_TH_VTN_1	PASS	TraceLog_121321_173309_097.txt
16	A_E1_0130_TH_VTN_1	PASS	TraceLog_121321_173404_789.txt
17	A_E1_0180_TH_VTN_1	PASS	TraceLog_121321_173519_070.txt
18	A_E1_0190_TH_VTN_1	PASS	TraceLog_121321_173620_108.txt
19	A_E1_0200_TH_VTN_1	PASS	TraceLog_010422_143118_871.txt
20	A_E1_0210_TH_VTN_1	PASS	TraceLog_122321_104911_006.txt
21	A_E1_0220_TH_VTN_1	PASS	TraceLog_122321_111320_907.txt
22	A_E1_0230_TH_VTN_1	PASS	TraceLog_122321_111826_489.txt
23	A_E1_0240_TH_VTN_1	PASS	TraceLog_122321_113546_207.txt
24	A_E1_0250_TH_VTN_1	PASS	TraceLog_122321_113841_767.txt
25	A_E1_0260_TH_VTN_1	PASS	TraceLog_122321_120926_944.txt
26	A_E1_0262_TH_VTN_1	PASS	TraceLog_122321_125052_199.txt
27	A_E1_0267_TH_VTN_1	PASS	TraceLog_122321_130558_296.txt
28	A_E1_0268_TH_VTN_1	PASS	TraceLog_122321_131708_789.txt
29	A_E1_0270_TH_VTN_1	PASS	TraceLog_122321_114250_776.txt
30	A_E1_0280_TH_VTN_1	PASS	TraceLog_122321_132730_997.txt
31	A_E1_0285_TH_VTN_1	PASS	TraceLog_121321_174505_699.txt

32	A_E1_0300_TH_VTN_1	PASS	TraceLog_122321_112633_205.txt
33	A_E1_0310_TH_VTN_1	PASS	TraceLog_122321_112758_539.txt
34	A_E1_0340_TH_VTN_1	PASS	TraceLog_121321_175016_417.txt
35	A_E1_0345_TH_VTN_1	PASS	TraceLog_121321_175125_263.txt
36	A_E1_0360_TH_VTN_1	PASS	TraceLog_121321_175242_955.txt
37	A_E1_0370_TH_VTN_1	PASS	TraceLog_121321_175340_015.txt
38	A_E1_0390_TH_VTN_1	PASS	TraceLog_122321_113026_195.txt
39	A_E1_0392_TH_VTN_1	PASS	TraceLog_122321_113200_396.txt
<b>General Test Scenarios</b>			
01	G1_4005_TH_VTN_1	PASS	TraceLog_011422_181357_445.txt
02	G1_4007_TH_VTN_1	PASS	TraceLog_011422_182049_830.txt
03	G1_4010_TH_VTN_1	NA	
04	G1_4011_TH_VTN_1	PASS	TraceLog_122321_133036_763.txt
05	G1_4012_TH_VTN_1	PASS	TraceLog_122321_133145_457.txt
06	G1_4015_TH_VTN_1	PASS	TraceLog_122321_133239_430.txt
07	G1_4030_TH_VTN_1	PASS	TraceLog_122321_133336_250.txt

※ The test result indicates “NA” that means the test cases are optional or not applicable to the tested device.

※ The test result indicates “SKIP” that means the PICS test case guidelines allowed test case to be skipped.

※ Log files for the executed test cases are provided in the electronic format.

## 4. Photos

Photo: DUT iEN

### VEN Diagnosis API 1.0.4 OAS3

/api-docs

made by CHTTL

Servers

http://203.66.168.47:8182 - Generated server url

#### 1. Configuration

- POST** /diagnosis/config/uploadVtnKeyStore Upload the VTN keystore(jks) to enable security
- POST** /diagnosis/config/setVtnUr1 Set VTN connection information
- POST** /diagnosis/config/removeVen Remove VEN
- POST** /diagnosis/config/removeMarketContextId Remove market context id of VEN
- POST** /diagnosis/config/clearVtnKeyStore Clear security mode
- POST** /diagnosis/config/addVen Add VEN
- POST** /diagnosis/config/addMarketContextId Add market context id for VEN
- GET** /diagnosis/config/listVens List all VENS
- GET** /diagnosis/config/listMarketContextIds List all market context id of VEN

#### 2. Registration

- POST** /diagnosis/register/register Register VEN to VTN
- POST** /diagnosis/register/query Query registration information of VTN
- GET** /diagnosis/register/info Get registration information of VEN
- POST** /diagnosis/register/info Set registration information of VEN
- POST** /diagnosis/register/clear Clear registration information of VEN
- POST** /diagnosis/register/cancel Cancel registration of VEN

**GET** /diagnosis/register/info Get registration information of VEN

Parameters Cancel

Name	Description
<b>venName</b> * required	ven name
string (query)	

Execute Clear

Responses

Curl

```
curl -X 'GET' \
'http://203.66.168.47:8182/diagnosis/register/info?venName=DUT_VEN' \
-H 'accept: application/json'
```

Request URL

```
http://203.66.168.47:8182/diagnosis/register/info?venName=DUT_VEN
```

Server response

Code Details

200

Response body

```
{
  "registered": true,
  "registrationId": "REG011422_193007_382",
  "venId": "VEN011422_193006_876",
  "vtnId": "TH_VTN"
}
```

Response headers

```
cache-control: no-cache,no-store,max-age=0,must-revalidate
connection: keep-alive
content-type: application/json
date: Thu, 20 Jan 2022 01:44:40 GMT
expires: 0
keep-alive: timeout=60
pragma: no-cache
```



### 3. Pull operations

- POST** /diagnosis/pull/stop Stop polling of all VENs
- POST** /diagnosis/pull/start Start polling of all VENs
- POST** /diagnosis/pull/once Trigger polling one time for specified VEN

### 4. Event operations

- POST** /diagnosis/event/setOpt Change an event's opt type to "optIn" or "optOut" of VEN
- POST** /diagnosis/event/request Send "request event" to VTN and process received events
- POST** /diagnosis/event/distributeEvent Simulate a "Distribute Event Message" to VEN and process received events
- POST** /diagnosis/event/clear Clear all events of VEN
- GET** /diagnosis/event/list Get all events of VEN
- GET** /diagnosis/event/get Get single VEN event by id

### 5. Opt operations

- POST** /diagnosis/opt/set Set Opt Schedule
- POST** /diagnosis/opt/setOptEvent Set Opt with Event
- POST** /diagnosis/opt/clear Clear all opt schedules of VEN
- POST** /diagnosis/opt/cancel Cancel Opt Schedule
- GET** /diagnosis/opt/list Get all opt schedules of VEN

**GET** /diagnosis/event/list Get all events of VEN

Parameters Cancel

Name	Description
<b>venName</b> * required string (query)	ven name
<input type="text" value="DUT_VEN"/>	
jsonOutput boolean (query)	json output?
<input type="text" value="false"/>	

**Execute** **Clear**

Responses

Curl

```
curl -X 'GET' \
  'http://203.66.168.47:8182/diagnosis/event/list?venName=DUT_VEN&jsonOutput=false' \
  -H 'accept: text/plain'
```

Request URL

```
http://203.66.168.47:8182/diagnosis/event/list?venName=DUT_VEN&jsonOutput=false
```

Server response

Code Details

200

Response body

EventID	Start	Duration	Random	Status	OptState	TestEvent	Response	MarketContext
Event011422_181422_966_0	2022/01/14 18:24:22	PT5M	N/A	CANCELLED	optIn	false	always	http://MarketContext1

Response headers

```
cache-control: no-cache,no-store,max-age=0,must-revalidate
connection: keep-alive
content-length: 554
content-type: text/plain;charset=UTF-8
date: Thu, 20 Jan 2022 01:45:44 GMT
expires: 0
keep-alive: timeout=60
pragma: no-cache
x-content-type-options: nosniff
x-frame-options: DENY
x-xss-protection: 1; mode=block
```

### 6. Report operations

- POST** /diagnosis/report/set set metadata report of VEN
- POST** /diagnosis/report/clear Clear all requested reports of VEN
- GET** /diagnosis/report/list Get all requested reports of VEN

#### GET /diagnosis/report/list Get all requested reports of VEN

Cancel

##### Parameters

Name Description

**venName** \* required

string  
(query)  
Ven Name

DUT\_VEN

Execute

Clear

##### Responses

###### Curl

```
curl -X 'GET' \
'http://203.66.168.47:8182/diagnosis/report/list?venName=DUT_VEN' \
-H 'accept: text/plain'
```

###### Request URL

```
http://203.66.168.47:8182/diagnosis/report/list?venName=DUT_VEN
```

###### Server response

**Code** Details

200

###### Response body

RequestID	CreateTime	NextUpdateTime	FinalUpdateTime	ReportSpecifierIDGranularity	IntervalStartIntervalDuration
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\*\*\*\*\*

###### Response headers

```
cache-control: no-cache,no-store,max-age=0,must-revalidate
connection: keep-alive
content-length: 319
content-type: text/plain;charset=UTF-8
date: Thu, 20 Jan 2022 01:46:57 GMT
expires: 0
keep-alive: timeout=60
pragma: no-cache
x-content-type-options: nosniff
x-frame-options: DENY
x-xss-protection: 1; mode=block
```

##### Responses

**Code** Description

Links