**Development Documentation**

DPP Test Instruction

# **Overview**

This document describes the DPP test steps and instructions with wpa\_supplicant. And list the wpa\_supplicant commands used in test for each device role when dpp auth, dpp configure and associate.

# **References**

# **Abbreviations and Acronyms**

|  |  |
| --- | --- |
| DPP | Device Provision Protocol |
| DUT | Device Under Test |
| CTT | Compliance Test Tool |
|  |  |

# **Design Notes**

## **Note : openssl should be updated to 1.02l in all devices running DPP (procedure mentioned in Appendix) and host\_mlme=1 should be set during load**

## **4.1 DUT as Enrollee, Initiator(Authentication), enrolled as STA**

The command flow is as following. DUT act as initiator and enrollee, configured as STA. CTT1 act as configurator. CTT2 act as responder and enrollee, configured as AP.

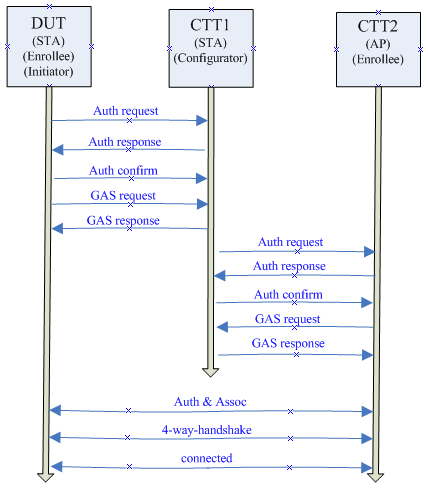


Figure 1. Frame Exchange Flow(QR)

In test, STA uses wpa\_supplicant and AP uses hostapd. QR code test steps(values in () represent command returned value. Command in <> represent optional value):

1. CTT1: wlan-set-mac 00:50:43:02:11:03

2. CTT1: wlan-dpp-configurator-add

conf\_id = 1

3. CTT1: wlan-dpp-configurator-params " conf=sta-dpp ssid=<hex\_ascii> configurator=< conf\_id>"

# space character exists between “ & conf word.

# ssid=DPP\_TEST for example: ssid=4450505f54455354

4. CTT1: wlan-dpp-bootstrap-gen "type=qrcode chan=115/36 mac=00:50:43:02:11:03"

bootstrap generate id = 1

5. CTT1: wlan-dpp-bootstrap-get-uri <bootstrap\_id>

Bootstrapping QR Code URI:

DPP:C:115/36;M:005043021103;K:…….

6. CTT1: wlan-dpp-listen "5180 role=configurator"

7. DUT: wlan-set-mac 00:50:43:02:11:02

8. DUT: wlan-dpp-qr-code DPP:C:115/36;M:005043021103;K:……….

DPP qr code id = 1

9. DUT: wlan-dpp-auth-init "peer=1 role=enrollee"

Results:

DUT: DPP-AUTH-SUCCESS, DPP-CONF-RECEIVED, DPP-CONFOBJ-SSID, DPP-CONNECTOR, DPP-C-SIGN-KEY, DPP-NET-ACCESS-KEY

CTT1: DPP-AUTH-SUCCESS, DPP-CONF-SENT

10. CTT2: wlan-set-mac 00:50:43:02:11:01

11. CTT2: wlan-add testAP ssid DPP\_TEST ip:192.168.10.1,192.168.10.1,255.255.255.0 role uap channel 36 wpa2 12345678

12. CTT2: wlan-start-network testAP

13. CTT2: wlan-dpp-bootstrap-gen "type=qrcode chan=115/36 mac=00:50:43:02:12:01"

bootstrap generate id = 1

14. CTT2: wlan-dpp-bootstrap-get-uri <bootstrap\_id>

Bootstrapping QR Code URI:

DPP:C:115/36;M:005043021201;K:……

15. CTT1: wlan-dpp-qr-code DPP:C:115/36;M:005043021201;K:……

16. CTT1: wlan-dpp-auth-init "peer=1 conf=ap-dpp ssid=4450505f54455354 configurator=< conf\_id>"

Results:

CTT2: DPP-AUTH-SUCCESS, DPP-CONF-RECEIVED, DPP-CONFOBJ-AKM, DPP-CONFOBJ-SSID, DPP-CONNECTOR, DPP-C-SIGN-KEY, DPP-NET-ACCESS-KEY

CTT1: DPP-AUTH-SUCCESS, DPP-CONF-SENT

Connection between DUT and CTT2 success and ping can work for more than 30 seconds.