TP-11333: One_Click_Mode_9.2.0

: Alethea SWAT WiCheck Quality Assurance Engineer
Product's: SWAT WiCheck Lite, WiCheck,ATF,D2A,Wisure,6E,AX,AC,and NRH's,Lina6&6E || Team Size: 20

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Dec. 19, 2024, 4:02 a.m.
Product: Wicheck_Testplan
Version: 9.2.0
Plan Type: Function
Reference link: -

Test cases

Summary | Search | Sort key | Search and add test cases

TC-30134: WTS 4.4.36 Roaming OKC Test — Pass | High | sanity | manu434 | manu434

Test Purpose:
The objective of the roaming test is to verify whether the device is able to roam with one AP to another AP. When the device moves, it may move out of the coverage of one AP and come into coverage of another. There can be a data outage when device disconnects from one AP and try to associate to another. Roaming mechanism makes this transition faster

Methodology:
Set up a wireless network in a controlled environment with two access points. Test equipment uses Lina to run the test. The test will simulate a field scenario for roaming as the user moves. Configure the clients to connect to APUT1 and then bring APUT2 within range. The test will then gradually induce pathloss between APUT1 and the clients until the clients find APUT2 as the better one to roam to. During the roaming process, the test will verify the handshake messages and report any data outages and roaming time.

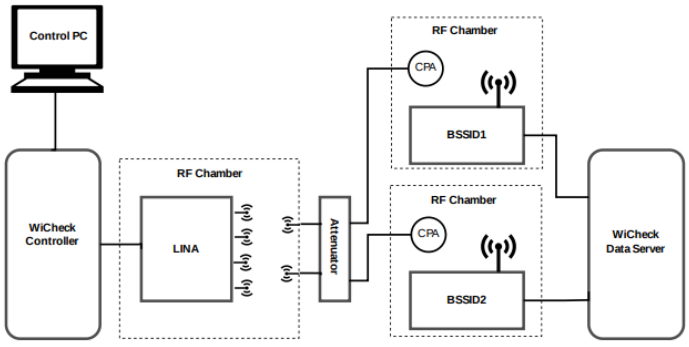
Test Environment:
1. APUT - 2
2. Lina
3. WiCheck Controller
4. RF chambers
5. Programmable attenuator
6. Circularly polarized antenna(CPA)
7. WiCheck Data Server

Test Configuration:
No of Clients (Lina) 12
Mode a/b/g/n/ac/ax 80/160 MHz
Security WPA2 Enterprise CCMP PEAP MS-CHAPv2
NSS 2x2
Band 2.4GHz/5GHz

Test Procedure:
1. Configure 12 clients for connection.
2. Position APUT1 within the client range and ensure APUT2 is outside of the range.
3. Connect the clients to APUT1.
4. Move APUT2 within range and gradually increase the path loss between APUT1 and the clients.
5. Verify state changes to confirm whether clients have successfully roamed to APUT2.
6. Repeat steps 4-5 until all clients have roamed to APUT2 or the signal strength between clients and APUT1 drops below -75dB.

Test Setup:

Test Setup



Expected Result:
1.The client should roam succesfully from AP1 to AP2 and vice versa
2.Verdict should come as PASS
3.Report verification should done propely

Glossary:
APUT: Access point under test.
Attenuator: Device to control signal strength.
BSSID: Basic service set identifier.
AP Rejection: AP rejection occurs when a client attempting to roam from one access point to another is declined by the new access point, often due

Attachments:
WTS_4.4.36_Roaming_OKC_Test.pdf
test-setup.png

Components:

Tags:

to factors like capacity limitations, security issues, signal strength, or network configuration mismatches.
No Better AP Found: The client has not found a better access point to roam.
Data Path Failure: The ping to MTS has failed.
Roam Status: Indicates the status of a client's roaming process, determined by successful roaming with operational data transmission.
Roam Time: Time Between 802.11 Authentication Request through EAPoL-Key (or Reassociation Response in case of FT).
Authentication Response Time: Amount of time taken by the client to receive a response after initiating an authentication request to AP2.
Reassociation Response Time: Amount of time taken by the client to receive a response after initiating a reassociation request to AP2.
4-Way Handshake Completion Time: The total time taken for all four steps of the handshake to be successfully exchanged between the client and AP2

Notes:
Notes

Comments:

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