What is Wi-Fi Test Suite?

Wi-Fi Test Suite is an integrated platform that automates testing Wi-Fi components or devices.

Wi-Fi Test Suite provides the following services:

* Configure - Automatically configure devices to execute test cases.
* Traffic Generation - Generate traffic streams with specified parameters.
* Test - Execute test scripts by controlling test bed device operation.
* Results Analysis - Determine pass/fail results based on a given test case or script criteria.

Wi-Fi Test Suite accomplishes the services through the following components:

* Control API (CAPI)

The Control API serves as the fundamental command language for device management, test configuration, and test execution within Wi-Fi Test Suite. The most recent [**CAPI Specification**](https://www.wi-fi.org/file/wi-fi-test-suite-control-api-specification-v831)is available to the public.

* Unified CAPI Console (UCC)

The Unified CAPI Console provides the overall control console for Wi-Fi Test Suite. UCC can be downloaded through the [**open source repository**](https://github.com/Wi-FiTestSuite/Wi-FiTestSuite-UCC)or by members in the most recent[**Wi-Fi Test Suite package**](https://www.wi-fi.org/members/certification-testing/wi-fi-test-suite).

* Control Agents

Control agents are a proxy in which a CAPI control command is converted for the device into the device’s native control interface. APs, DUTs, sniffers, and STAs may require control agents. Sample control agent code can be downloaded through the open source repository ( **[Windows](https://github.com/Wi-FiTestSuite/Wi-FiTestSuite-Win-DUT)**or [**Linux**](https://github.com/Wi-FiTestSuite/Wi-FiTestSuite-Linux-DUT)) or by members in the most recent [**Wi-Fi Test Suite package**](https://www.wi-fi.org/members/certification-testing/wi-fi-test-suite).

* Sniffer

The sniffer captures and dissects wired and wireless frames, and performs packet analysis. Sniffer dissectors are available on [**Wireshark**](https://www.wireshark.org/)or, for Wi-Fi Alliance certification program specific dissectors, in the most recent [**Wi-Fi Test Suite package**](https://www.wi-fi.org/members/certification-testing/wi-fi-test-suite).

* Traffic Generator

The traffic generator produces specific traffic on behalf of Test Bed STA, DUT, or PC Endpoint. Traffic generators are included in the open source repository ( **[Windows](https://github.com/Wi-FiTestSuite/Wi-FiTestSuite-Win-DUT)**or[**Linux**](https://github.com/Wi-FiTestSuite/Wi-FiTestSuite-Linux-DUT)) and in the most recent [**Wi-Fi Test Suite package**](https://www.wi-fi.org/members/certification-testing/wi-fi-test-suite).

* PC Endpoint

The PC Endpoint generates network traffic in support of a particular test plan via the wired Test Network. PC Endpoint software is included in the [**Linux control agent code**](https://github.com/Wi-FiTestSuite/Wi-FiTestSuite-Linux-DUT)and in the most recent [**Wi-Fi Test Suite package**](https://www.wi-fi.org/members/certification-testing/wi-fi-test-suite).

* Wi-Fi Alliance certification program test scripts

CAPI command scripts are the Wi-Fi Test Suite specific instantiations of Wi-Fi Alliance test plans. Wi-Fi Alliance certification program test scripts are only available to members in the most recent [**Wi-Fi Test Suite package**](https://www.wi-fi.org/members/certification-testing/wi-fi-test-suite).