Certification Process Overview

Version 3.6
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Revision History

Version	Date	Remarks
1.0 r0.8	February 1st, 2005	First release
1.1r11	February 18th, 2005	Addition of Product Access Policy Editorial changes Additional definitions Eliminate ATL product bailment
1.2r12	April 8, 2005	Updated ASD process Supplicant testing policy
1.3r13	April 18, 2005	Updated to Module Policy 2.0 Added Certification Transfer Policy 1.0 Pagination & contact information
1.3r14	June 9, 2005	Replace Certlabs with ATLs Editorial changes Updates to reflect WBCS Update contact information (Kerbow) Removed Agilent references Removed Product Name Change form
1.3r14	September 8, 2005	Fixed formatting on Table of Contents
1.3r15	September 21, 2005	Template Definitions
1.3r16	September 28, 2005	Reordered Section 1 Created program overview section Definition language and alphabetized Removed Appendices D-M Updated Certification Process Section Fixed versioning Added References Section
2.0r17	October 18, 2005	Added detail on pre-certification Added definitions Improved process explanation
2.1r18	June 16, 2006	Added definition Updated references
2.1r19	May 20,2011	Updated logo

Version	Date	Remarks
		Changed address
		Edited definitions
		Edited links
		Removed reference to committees
2.1r20	May 23, 2011	Updated Program Overview
		Updated eligible participants
		Updated Additional Information
		Updated Initiating Certification
		Replaced Glossary with weblink
		Replaced Appendix: A with weblink
		Replaced Appendix B: with weblink
		Replaced Appendix C: with weblink
3.0r21	August 2012	Edited definitions
		Changed grievances contact
		Update URLs, general cleanup
3.1	January 2015	Update to reflect new Certification policy for Derivatives
3.2	October 2015	Update to reflect new Implementer class
3.3	July 2016	Update to align with new Derivative Policy 4.0
		Update to reflect change from Regular member to Contributor member
3.4	November 2016	Editorial changes
3.5	March 2020	Editorial changes
3.6	November 2020	Editorial changes
		Added variant updates

1. Scope

This manual was created to define the Wi-Fi Alliance® certification process. Wi-Fi Alliance members may use this manual to learn about product certification and to remain up to date regarding governing policies and procedures. Test laboratories may use this document to understand the process and requirements to qualify as an Authorized Testing Laboratory (ATL).

2. References

[1]   Derivative Certification Policy

[2]   Recertification Policy

[3]   ASD Policy

[4]   Product Access Policy

Wi-Fi Alliance policies may be found here: https://www.wi-fi.org/who-we-are/governing-documents.

3. Definitions

ASD	Application-specific devices are products that cannot be Wi-Fi CERTIFIED under a standard Wi-Fi Alliance test plan because they do not comply with the standard test configuration or because they are designed to perform a specific function (ASD Policy [3]).
ATL(s)	Authorized Test Laboratory(ies) are independent testing organizations that received training and completed examinations before becoming authorized to test products against Wi-Fi Alliance test plans.
Certification program	Refers collectively to the set of operating procedures, policies, roles, and responsibilities that make up the Wi-Fi Alliance certification operation.
Certification system	An online tool used to track all certification-related activities, as well as maintain all completed certification records. The system may be accessed from https://certifications.wi-fi.org/ and requires proper credentials.
CID	Certification identification number. A unique tracking number that is assigned to a certification application for record keeping. A product will only have one CID even though it may be certified at different times for different programs.
Member	Members are companies that complete a number of requirements, including conformance to a membership agreement and an Intellectual Property Rights Policy, as well as an annual membership fee, and remain in good standing with Wi-Fi Alliance for the period of their membership.
Product	For the purpose of the certification program, products are 802.11 devices, wireless products, or equipment that has or will test for Wi-Fi Alliance certification programs.
Variant	A new version of a previously Wi-Fi CERTIFIED product that includes a change to the components and/or capabilities and maintains Wi-Fi interoperabilty.
Wi-Fi CERTIFIED™	The certification standard designating IEEE 802.11-based wireless local area network (WLAN) products that have passed testing requirements developed and governed by Wi-Fi Alliance. (See Wi-Fi Alliance Interoperability Certificate).
Wi-Fi Alliance Interoperability Certificate	A statement that a product has passed testing and will work with other Wi-Fi CERTIFIED products. (See Wi-Fi CERTIFIED).

4. Program Overview

Wi-Fi Alliance is a global non-profit industry association of leading companies devoted to proliferation of Wi-Fi® technology across devices and market segments. With technology development, market building, and regulatory programs, Wi-Fi Alliance has enabled widespread adoption of Wi-Fi worldwide.

The Wi-Fi CERTIFIED™ program was launched in March 2000. It provides a widely-recognized designation of interoperability, security and quality, and helps to ensure that Wi-Fi enabled products deliver a good user experience. The Wi-Fi CERTIFIED program encourages the expanded use of Wi-Fi products and services in new and established markets.

All other Wi-Fi Alliance certification program requirements and policies (e.g. those referenced in section 2) take precedence over this overview.

4.1   Wi-Fi Technology

Wi-Fi networks use radio technologies referenced by IEEE specifications (e.g. 802.11n, 802.11ac, 802.11ad and 802.11ax) to provide secure, reliable, and fast wireless connectivity. Wi-Fi networks operate in unlicensed spectrum (e.g. in 2.4 GHz, 5 GHz, 6 GHz and 60 GHz radio bands).

4.2   Roles and Responsibilities

4.2.1 Wi-Fi Alliance

Wi-Fi Alliance is the owner of the Wi-Fi CERTIFIED certification program, maintains the policies and requirements of the program, and distributes finalization letters and interoperability certificates to its members upon successful certification. Wi-Fi Alliance manages the group of worldwide ATLs, reviews test results, and has final authority for approval of Wi-Fi CERTIFIED products under the certification program. Wi-Fi Alliance also maintains all program records and executes all program policies.

4.2.2 Authorized Test Laboratories

ATLs operate as independent testing facilities.

4.2.3 Wi-Fi Alliance Members

Members who wish to obtain certification of a product shall follow the procedures in the certification procedures section of this document and shall follow all relevant Wi-Fi Alliance policies.

Members may choose to test their product at any ATL.

4.3   Authorized Test Laboratory Operations

4.3.1 Qualification, Authorization and Training

Wi-Fi Alliance qualifies and authorizes ATLs to perform test activities on behalf of Wi-Fi Alliance. As a part of the qualification process, Wi-Fi Alliance trains ATL personnel on Wi-Fi Alliance test procedures and relevant policies and requirements.

Certification training includes:

- Administration
- Standard test plan requirements and tests
- ASD testing
- Program administration
- Quality standards

Each ATL shall ensure that test bed equipment conforms to Wi-Fi Alliance technical specifications as described in each Wi-Fi Alliance test plan and applicable engineering change notices (ECNs).

In conducting its certification testing operations, the ATL shall ensure the suitability and competence of its staff and/or systems carrying out testing, registration, recording, and reporting.

Pertinent contact information, documentation, procedures, websites, etc. used routinely in ATL operations shall be made available by the ATLs to Wi-Fi Alliance for posting on the Wi-Fi Alliance website and/or for use to the benefit of members as determined by Wi-Fi Alliance.

4.3.2 Laboratory Information for Members

ATLs shall provide Wi-Fi Alliance all required information regarding how members will interface with the ATL in order to complete testing. This information includes:

- Contacts
- Cancellation and postponement policies
- Terms
- Websites and links

Administrative and operational activities between members and the ATL including scheduling, equipment delivery, on-site testing, reporting, approvals, and ad hoc communications.

4.4 Eligible Members

Only Contributor, Sponsor, Small Business Introductory Participant, or Affiliate members in good standing may submit products to ATLs for interoperability testing or certification.

All members in good standing may apply for a derivative certification based on a tested source product ([1]).

Certifications remain valid only while member is in good standing with Wi-Fi Alliance.

5. Certification Procedures

5.1   Certification Process

Members shall utilize the online certification system to apply for certification. Eligible members shall contact the ATL of their choice directly for scheduling tests or obtaining quotes for services.

The general steps for product certification are as follows:
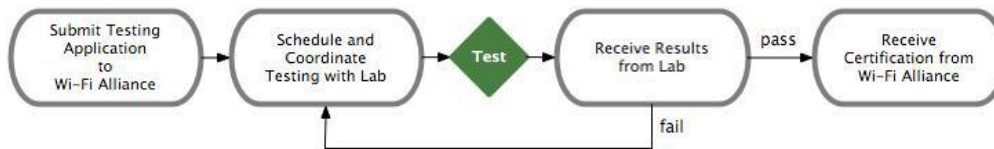
1. Member submits a testing application to Wi-Fi Alliance to receive a CID
2. Member coordinates with ATL to schedule a test date, make financial arrangements, and deliver equipment
3. ATL performs tests and issues test reports to the member and Wi-Fi Alliance
4. If product fails testing, the member may re-test (additional ATL fees may apply)
5. Staff reviews results. Upon verification of membership status, successful testing, and if no other reason to withhold certification is found, the certification is granted for the product.

5.2   Initiating Certification with Wi-Fi Alliance

The certification process begins when a member submits an application to Wi-Fi Alliance to receive a CID. Applicants apply online using the Wi-Fi Alliance certification system (https://cert.wi-fi.org/). An account is required to log in to the online certification system.

Eligible members will have the option of applying for one of the following:

- New certification - products that have not been previously Wi-Fi CERTIFIED
- Variant certification - a new version of a previously Wi-Fi CERTIFIED product that includes a change to the components and/or capabilities and maintains Wi-Fi interoperabilty.
- Derivative certification - products based on a tested Wi-Fi CERTIFIED product that has been identified as a Source certification that may only have been modified in ways that do not affect Wi-Fi operation ([1])

Eligible members will also have the option to submit an application on behalf of another eligible member. The online test application provides a member list from which the applicant may assign a certification owner. Final certification information will be listed online under the assigned owner company. All final certifications and records will be submitted to the assigned certification owner.

Members are responsible for the accuracy of all certification information provided in the test application.

Once the product is Wi-Fi CERTIFIED, members should notify Wi-Fi Alliance of any Wi-Fi related changes to the product in order to maintain certification or update the certification record via the online certification system.

5.3   Authorized Test Laboratory Certification Procedures

5.3.1   Background

Each ATL is responsible for all administrative activities between its organization and the member. Each ATL shall conform to Wi-Fi Alliance Authorized Test Laboratory Procedures Manual.

5.3.2   Laboratory Locations

Wi-Fi Alliance has authorized a number of ATLs to perform certification testing throughout the world. The latest up-to-date list of ATLs and pre-certification laboratories may be found on the Wi-Fi Alliance website (https://www.wi-fi.org/certification/authorized-test-laboratories).

5.3.3   Laboratory Testing Fees

ATLs operate independently. Members should contact the laboratory of their choice to find specific certification test costs.

5.3.4   Test Reservations

ATLs will provide members a means to reserve, schedule, re-schedule, cancel, or edit a test time or location. The scheduling process shall provide members written confirmation mechanisms, e.g. email, with details about the test, equipment, schedule, cancellation, re-scheduling, etc.

5.3.5   Representative Test Product

The member is required to submit two representative samples of the product to be tested directly to the ATL.

When shipping samples to the ATL, members shall include all relevant software. Full documentation, instructions, IP addresses, passwords, and or login information should also be included.

When the ATL completes testing, it shall notify Wi-Fi Alliance and Wi-Fi Alliance will then have the option to retrieve the tested product for audit, verification, calibration or various other program activities. Refer to the Product Access Policy ([4]) for more information. The ATL or Wi-Fi Alliance will return the sample product to the member, or at the direction of the member, the ATL may destroy the sample in such a way as to maintain its confidentiality.

5.3.6   Testing

5.3.6.1 Test Length

Test length varies per product test depending on the type and number of certification(s).

5.3.6.2 Test Monitoring

Members may elect to have member employees present at the ATL facility during tests. ATLs shall provide the means necessary for members to schedule and coordinate such visits. Once testing begins, members shall not incorporate any changes to the product in testing. A "hands-off" policy is strictly enforced by the ATLs once testing begins.

5.3.6.3 Re-Testing

In the event that the product fails to pass certification testing, the member may make modifications to the product and may, subject to additional fees, resubmit the newly modified product for certification testing as many times as may be required to pass certification testing.

5.3.7 Laboratory Test Reporting

5.3.7.1   Test Notification

ATLs shall send notification to the member and to Wi-Fi Alliance no later than one (1) business day after equipment testing has been completed. This communication will include all equipment details, test(s) and whether the equipment passed or failed the tests.

5.3.7.2   Test Reports

ATLs will issue the member confidential, itemized test results for every test performed. This report shall be issued no later than five business days after the test has completed. ATLs shall keep records of all test reports.

Be aware that the report does not signify certification. The test report shall include, at a minimum:

1. Equipment details
    a.   Product name
    b.   CID number
    c.   Certification owner company name
    d.   Type of product
    e.   If the equipment is an ASD
    f.   If the equipment has previous certification(s)
    g.   If equipment is being re-tested
2. Test date
3. Type of tests completed, referencing corresponding test plan section
4. Test results for each test, including:
    a.   Name of test/test section
    b.   Pass/fail
    c.   Measured throughputs
    d.   Required throughputs
5. For any failed tests, supplemental information as appropriate, for example:
    a.   Failure mode
    b.   Packet traces
    c.   Server logs
6. Process and administration information:
    a.   Confidentiality clause
    b.   Intellectual property clause
    c.   Certification not complete clause
    d.   ATL location
    e.   Testing staff names and contacts

ATLs may offer additional anonymous comparative information within the report as the ATLs may derive from data aggregated from previous tests, provided that such data maintains the confidentiality of other members' products and results.

These reports are available to Wi-Fi Alliance for review at any time after they are issued.

5.4   Certification Application Review

Once equipment has successfully tested at an ATL and ATL notification has been received by Wi-Fi Alliance, the process begins of issuing a Wi-Fi Alliance Interoperability Certificate and corresponding logo. The product review will be completed by Wi-Fi Alliance staff.

Wi-Fi Alliance staff will review the following items before granting certification:

1. Member is currently in good standing
2. Equipment record details
3. ATL test results

Once the items above have been reviewed and confirmed, the product will then become Wi-Fi CERTIFIED and the member may use the interoperability certificate and Wi-Fi Alliance certification marks as listed in the Wi-Fi Alliance Brand Style Guide (https://www.wi-fi.org/file/wi-fi-alliance-brand-styleguide).

Wi-Fi Alliance will provide the member a certification confirmation notice by email. This email will include the following:

1. Interoperability certificate
2. Brand Style Guide
3. Finalization letter stating the product has been Wi-Fi CERTIFIED by Wi-Fi Alliance

At this time the product will be listed on the Wi-Fi Alliance website as a Wi-Fi CERTIFIED product, unless the member selects to not share the information.

5.4.1   Interoperability Certificate

The Wi-Fi Alliance Interoperability Certificate assures the end customer of interoperability with other standards-compatible networking equipment that also bears the Wi-Fi CERTIFIED logo.

5.4.2   Certification Ownership

Certification ownership may change in the event an organization is acquired or becomes an affiliate of a parent organization.

5.4.3   Period of Certification

Certification is for the life of the equipment. If the member status changes to not in good standing, the member may no longer utilize Wi-Fi Alliance certification marks.

Members are responsible for updating the certification system with the following:

1. Firmware/software revisions
2. Updated product details (e.g., commercial product name, SKU, etc.)
3. Re-testing if material changes are made to the Wi-Fi CERTIFIED product. Material changes may include software or hardware revisions, or changes to how the wireless component operates within a host product.
4. When a product becomes obsolete

5.4.4   Requests to Obsolete Products

Members may choose to obsolete a product when it is no longer commercially available. When a product becomes obsolete, it will be removed from the Wi-Fi Alliance public records of Wi-Fi CERTIFIED products.

5.5   Wi-Fi CERTIFIED Logo

Upon completion of certification, members will receive the Wi-Fi CERTIFIED logo along with other Wi-Fi logos for use on equipment and packaging. Please refer to the Wi-Fi Alliance Brand Style Guide for proper use of the logos.

5.6   Certification Program Support

Members or ATLs who have concerns with program records, process, policies, or any other aspect of Wi-Fi Alliance certification programs may address. questions and comments to support@wi-fi.org.