TELECOM INFRA PROJECT

OpenLAN PG
OpenWiFi Subgroup

Open & Disaggregated Enterprise Wireless LAN

This Project Subgroup Charter establishes the purpose, project scope, and intellectual property license terms applicable to the Project described below (the "Project"). Only Participants whose Authorized Representative executes or otherwise agrees to the OpenLAN PG Charter and this Project Subgroup Charter are permitted to participate in this Subgroup in accordance with the TIP Bylaws.

TIP Board of Directors Approval Date: December 19, 2023
Charter Effective Date: January 4, 2024

1. PG SUBGROUP NAME

OpenWiFi ("OpenWiFi")

2. PURPOSE

Wi-Fi is a ubiquitous technology used for business networks in a wide range of verticals (MDU, education, retail, hospitality, public venues, carpeted office, etc.) and has become mission critical for SMB's, enterprises and many other businesses, connecting an ever-growing number of devices and applications onto the internet.

OpenWiFi's mission is to create a rich open ecosystem of interoperable solutions including Whitebox Wi-Fi access points and cloud native management plane, thereby accelerating innovation by providing choice and reducing vendor lock-in, reducing the barrier to entry for new suppliers, and improving industry collaboration.

3. SUBGROUP SCOPE

The OpenWiFi Subgroup is a dedicated open-source community for the design, development and testing of local, wireless disaggregated networking systems consisting of Wi-Fi access points, IoT radios and other technologies.

The group is developing a common technology stack foundation for community members to leverage in creating a diverse set of solutions for the market with members developing differentiated offerings unique to their verticals on top of the shared common tech stack.

The group will focus on the iterative development, validation, and contribution to OpenWiFi:

- Manage a development roadmap of new solutions, features and capabilities for OpenWiFi driven by community interests.
- Contribute software requirements, design artifacts, architectures, APIs, data models, source code and workflows to the group open-source repositories and project Wiki.
- Reference to and reuse of existing industry standards and available components as appropriate.

- Availability of automated testing in labs delivered to TIP standards to validate OpenWiFi systems core components.
- Solution hardening by supporting field trials (Service Provider, OEMs, ODMs, business verticals, etc.)

General Deliverables

- **Rich Whitebox hardware ecosystem:**
  - Curate a range of Wi-Fi AP's (indoor, outdoor, wall-mount, WiFi6E/WiFi7) and other similar devices
  - Develop group requirements and recommendation for common ODM SKU's
  - Validation and badging of ODM commercial SKU's
  - Select open-source hardware designs to be used as reference platforms

- **Rich pre-integrated and validated open-source software stack:**
  - Curated open-source network operating systems
  - De facto standardized cloud management protocol (validated client / server implementation)
  - CloudSDK (foundation software framework for development of cloud management systems)
  - Common Telco/Enterprise system capabilities in open source (Passpoint, overlay tunneling, etc.)

- **Operation of community infrastructure services:**
  - Centralized Certificate Authority (CA) infrastructure for OpenWiFi enabled systems with self service capabilities (API & GUI)
  - Global secure Zero Touch Provisioning (ZTP) using the TIP CA framework
  - Continuous integration, deployment & automated testing pipeline for the open-source software:
    - Standardized TIP images for whitebox devices
    - CloudSDK microservices
    - Utilities (load-generator, test-automation code, etc.)

Delivery Process

- Software development, including continuous integration and automated test, will be managed, tracked, and delivered by industry standard, open-source practices including defined roadmap, feature backlog, defined agile delivery sprints, standup meetings and other common practices
- System design and validation artifacts will be managed, tracked and delivered via industry standard, open-source practices and published in the project group tools (JIRA/Wiki/GitHub/Hivebrite)

4. COLLABORATION

The Subgroup will reside under the OpenLAN Project Group and collaborate, as necessary, with other Subgroups within OpenLAN.

The OpenWiFi Subgroup will also engage and collaborate with other TIP Project Groups as appropriate. A key driver of this collaboration will be the public availability of the software, test automation and system validation code and documentation artifacts contributed to OpenWiFi.

In addition, the group will collaborate with and reuse existing software components, as appropriate, from other industry groups related to network software and infrastructure such as:

- Wi-Fi Alliance (https://www.wi-fi.org/)
- Wireless Broadband Alliance (https://wballiance.com/)
- OpenWRT (https://openwrt.org/)

5. SUBGROUP LEADS AND CO-LEADS

The Subgroup will have a minimum of one and a maximum of three designated Leads/Co-Leads to oversee and guide general group activities. These Leads/Co-Leads will report and align upwards into the general OpenLAN Project Group.

6. SOFTWARE PROJECT Maintainer responsibilities

The Maintainer(s), according to the Telecom Infra Project IPR Policy, have the following responsibilities:

- The Maintainer(s) will coordinate the Contributions of Contributors (including accepting or rejecting proposed Contributions), the hosting of the Project, and handling of pull requests in accordance with the then-current TIP Guidelines for Maintainers for TIP Software Projects
- The Maintainer(s) will determine practices for releases of updates subject to approval by the Board of Directors or an Administrative Committee formed in accordance with the TIP Bylaws
- The Maintainer(s) have the additional responsibilities described in this Charter and as may be delegated to them from time to time by the TIP Board of Directors, including:
    - Ensuring that all Contributors' Authorized Representatives have executed the TIP Software Contribution and License Agreement
    - Tracking all Contributions submitted including the date of submission, the entity responsible for the submission, and whether the Contribution was accepted, with or without modification, or rejected
    - Appointing and managing Committers, if any, in accordance with the then-current TIP Guidelines for Maintainers for TIP Software Projects
    - Coordinating with TIP legal counsel to ensure compliance with all third-party software licenses including free and/or open-source software licenses, as necessary

7. SERVICES PROVIDED BY TIP

- GitHub repositories
- Atlassian Suite (at time of writing, Jira, Confluence)
- Participant collaboration suite (at time of writing, Hivebrite)
- Slack or equivalent instant messaging and collaboration suite
- Zoom or equivalent video collaboration suite
- Subgroup Email to communicate with OpenWiFi members

8. INITIAL SOURCE CODE CONTRIBUTION

- OpenWiFi Firmware source code under Standard 3-clause BSD License
- OpenWiFi Controller (known as Cloud SDK) source code under Standard 3-clause BSD License
- Supporting source code documentation under TIP Document IPR Policy
- Source Code and Documentation links

9. SOFTWARE PROJECT TERMS

This OpenLAN Project Group Charter establishes the purpose, project scope, and intellectual property license terms applicable to the software projects undertaken within its Subgroups, including this OpenWiFi Subgroup. License. Terms relating to Licensing, contribution, and Deliverables are as set forth in the OpenLAN Project Group Charter.