Securely adding devices to Wi-Fi® networks just got easier

The Wi-Fi® device ecosystem continues to grow. No longer limited to computers and smartphones, devices ranging from fitness trackers to doorbells, ovens, sprinkler systems and more all have Wi-Fi capability. The trend toward connecting everyone and everything, everywhere, continues as more devices connect to and are managed through Wi-Fi. Many of these new device types have little to no user interface, making configuration and Wi-Fi network connection cumbersome. With no standardized configuration and authentication process, onboarding these devices to a Wi-Fi network varies widely and is based on vendor-specific implementations.

Wi-Fi Alliance® has developed a solution to ensure the simple, secure addition of any Wi-Fi device—including those with little or no user interface—to a Wi-Fi network. Wi-Fi CERTIFIED Easy Connect™ reduces the complexity of onboarding Wi-Fi devices while still maintaining high security standards. Wi-Fi Easy Connect™ enables the utilization of another device with a more robust interface, such as a smartphone or tablet, to provision and configure devices by simply scanning a product quick response (QR) code.

Standardized simplicity for connecting smart home and IoT devices

With Wi-Fi Easy Connect, a device with a robust interface is chosen to be a central point of configuration and designated as a configurator device. The configurator is responsible for provisioning all devices on the network, including the initial access point (AP). The configurator may be a mobile device such as a smartphone or tablet, or another device such as an AP, with the configurator role available through a web interface or a software application. All other devices on the network are considered enrollee devices.

Once a Wi-Fi Easy Connect configurator establishes a Wi-Fi connection with an AP, onboarding other devices is as simple as scanning the QR code associated with the device, which contains unique identification and security information. The configurator enables the enrollee device to discover, select, and connect to the Wi-Fi network. Digital or printed QR codes can be used to enroll devices onto the network.

Key benefits

- Provides a standardized, consistent method for onboarding devices
- Simplifies provisioning through use of QR codes and user-chosen device to manage network access
- Connects any Wi-Fi CERTIFIED Easy Connect device, including those with little or no user interface
- Uses public key cryptography for secure authentication
- Supports provisioning for WPA2™ and WPA3™ networks
- Enables the replacement of APs without the need to re-enroll all devices to the new AP
Wi-Fi Easy Connect user experience

Never before has it been so easy to configure devices onto a Wi-Fi network. Wi-Fi Easy Connect simplifies the process of bringing new devices onto Wi-Fi networks by managing the process with minimal user interaction. There is no need to remember and enter passwords and no lengthy instructions to follow to provision devices.

1. Scan access point QR code to establish the network
2. Scan client device QR codes to provision and enroll devices
3. Devices seamlessly connect to the network

Configurators can enroll client devices using digital or printed QR codes. Alternatively, the technology supports authentication using a human-readable string when a QR code is not available.

Wi-Fi Easy Connect also works with multiple AP installations, such as Wi-Fi CERTIFIED EasyMesh™ systems. Wi-Fi Easy Connect technology brings a new level of convenience to users while maintaining secure connections.

Wi-Fi: Technology to trust

Since 2000, Wi-Fi Alliance has been driving the adoption and evolution of Wi-Fi through its Wi-Fi CERTIFIED™ program. The Wi-Fi CERTIFIED logo designates products with proven interoperability, backward compatibility, and the highest industry-standard protections in place. Wi-Fi CERTIFIED devices can communicate with previous and future generations of Wi-Fi technologies, supporting use cases including seamless network access, multimedia, and device-to-device connectivity.

Wi-Fi CERTIFIED devices give consumers confidence that the product they purchase will deliver a consistently good user experience.

Learn more: www.wi-fi.org/wi-fi-easy-connect