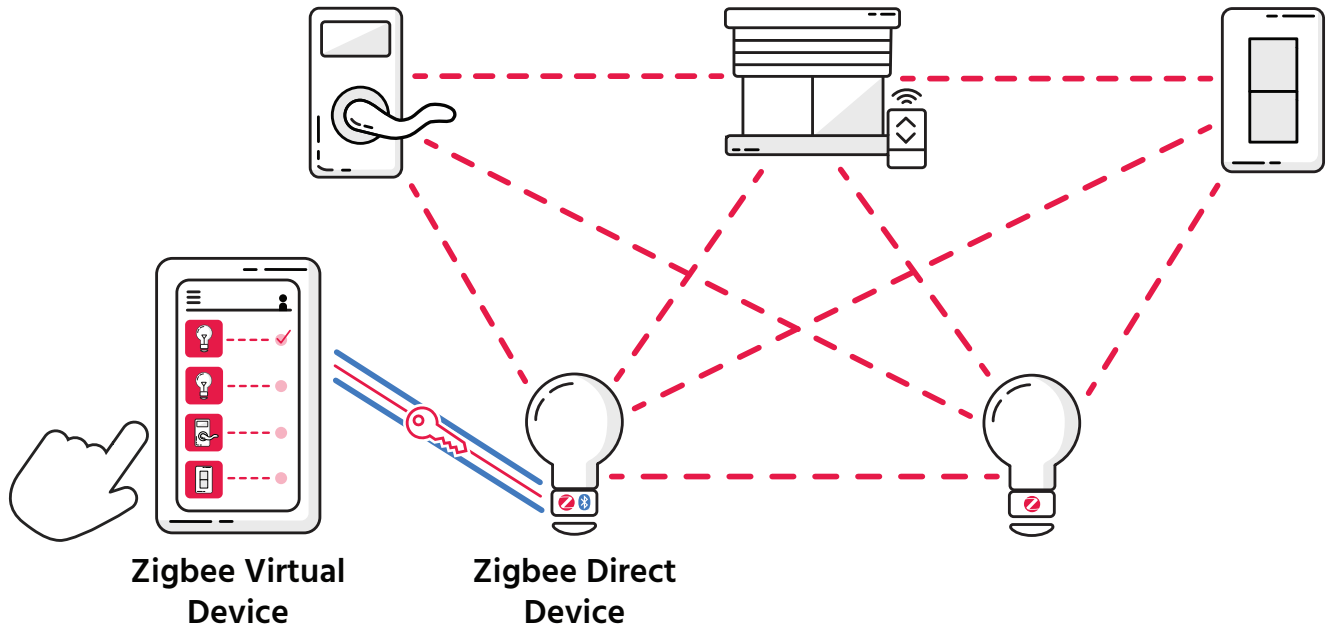


Zigbee Direct simplifies onboarding and control of Zigbee devices directly via Bluetooth® Low Energy (Bluetooth LE) devices. It allows users to seamlessly interact with their Zigbee networks using a smartphone, tablet, or other Bluetooth LE enabled device, simplifying the user experience in commercial and home applications.



How It Works

Zigbee Direct allows Bluetooth LE devices to function as Zigbee nodes by transmitting Zigbee messages over Bluetooth LE.

A **Zigbee Virtual Device (ZVD)** is a Bluetooth LE-enabled device, such as a phone or a smart speaker, without a Zigbee radio. Zigbee functionality is provided via software on a Bluetooth LE device.

A **Zigbee Direct Device (ZDD)** is a smart device that has both Zigbee and Bluetooth LE radio onboard and is used as a proxy between a ZVD and a Zigbee network.

Using a secure Bluetooth LE connection, the **ZVD** can onboard and control devices on the Zigbee network.

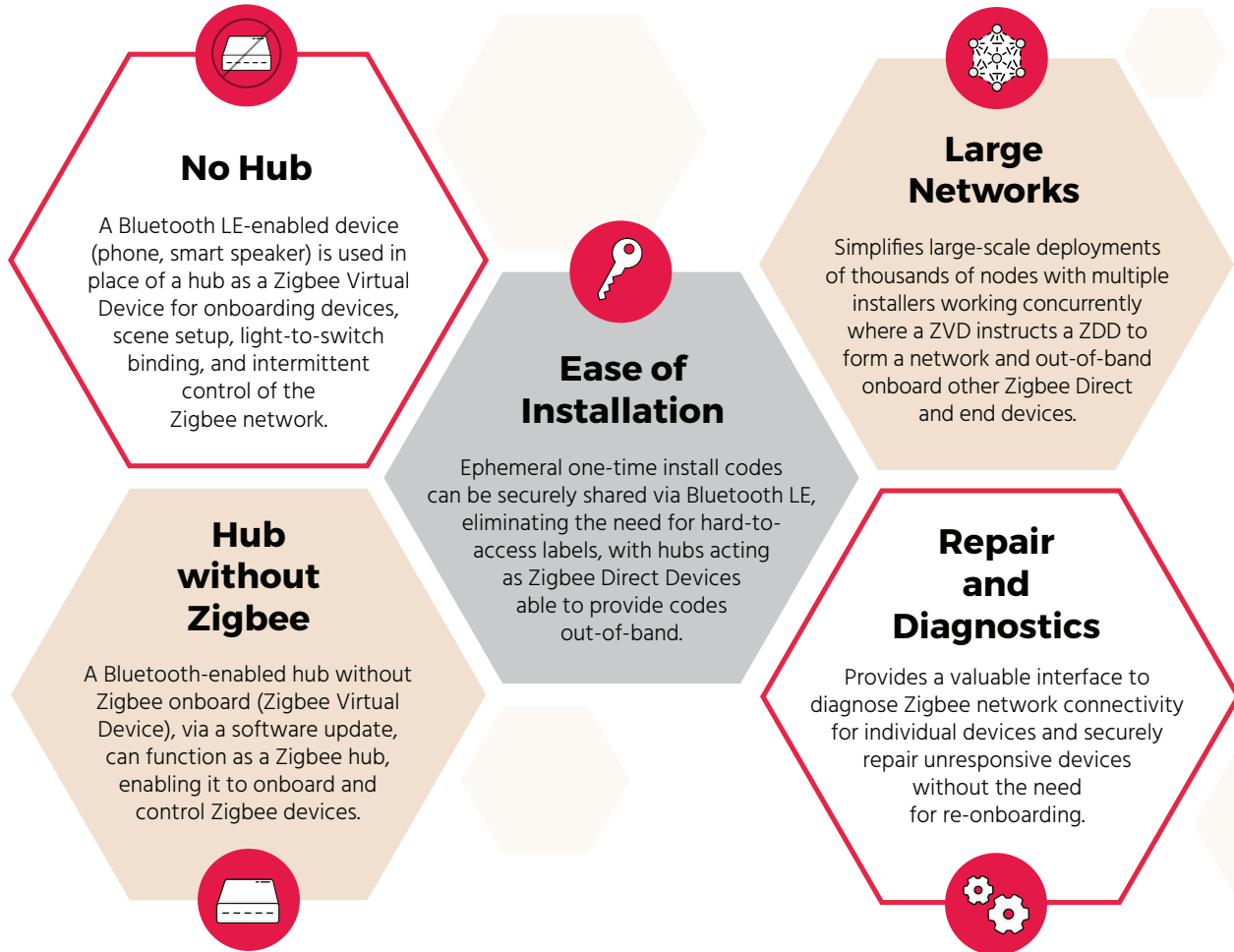
Security

Zigbee Direct leverages a multi-layered security architecture, ensuring a safe and encrypted environment for Smart Home and Building ecosystems.

- End-to-End Encryption
- Mutual Authentication
- Protected Zigbee Network Credentials
- Elliptic Curve Cryptography (ECC)
- Resilient Against Cyber Threats

Use Cases

Zigbee Direct is a feature of Zigbee that enhances onboarding and control of devices. It supports the ability to send/receive Zigbee data using Bluetooth LE and to communicate with all of your Zigbee devices.



Benefits

With billions of Zigbee devices already deployed, Zigbee Direct enhances market reach by making it easier to interact with Zigbee networks through existing Bluetooth LE-enabled consumer devices, such as smartphones.



Developers: Streamline system design, development, and testing by using Bluetooth LE to seamlessly connect Zigbee devices, unlocking broader integration of Zigbee into IoT ecosystems.



Installers: Conveniently and efficiently manage installation and onboarding of small to large-scale deployments for residential and commercial markets.



Consumers: Easily onboard and control Zigbee products by using Bluetooth LE-enabled devices, such as your phone.