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The Future of IoT is Now
Project Connected Home over IP

A few details about the webinar…

A recording of the webinar will be made available on the Alliance website.

We will leave time for questions at the end of the webinar. Please enter your questions in the Question Box at any time.

If we do not get to your question during the webinar you may contact us at **help@zigbee.org**

Agenda

- Who is the Zigbee Alliance?
- What is Project Connected Home over IP?
- Unifying the IoT Industry
- How the Standard Stacks Up
- Device Types & Network Topology
- Looking Ahead
  - Security & Privacy
  - Open Source
  - Certification and Testing
  - How to Get Started

Speakers

Michelle Mindala-Freeman
Zigbee Alliance
Head of Marketing

Daniel Moneta | Google
Project CHIP Marketing & Product
Sub Group Chair

Kevin Po | Google
Zigbee Alliance
Board Director

Anthony Scocco | Google
Project CHIP Certification
Sub Group Vice Chair

Mark Tekippe
Samsung SmartThings
Zigbee Alliance Board Director

Naveen Kommareddi | Apple
Project CHIP Certification
Sub Group Chair

Oren Segal | Apple
Project CHIP
Steering Committee

Asad Haque | Comcast
Project CHIP
Steering Committee

Steve Hanna | Infineon Technologies
Project CHIP Security Marketing
Team Lead

Ann Olivo-Shaw | Tuya Smart
Zigbee Alliance
Promoter Member

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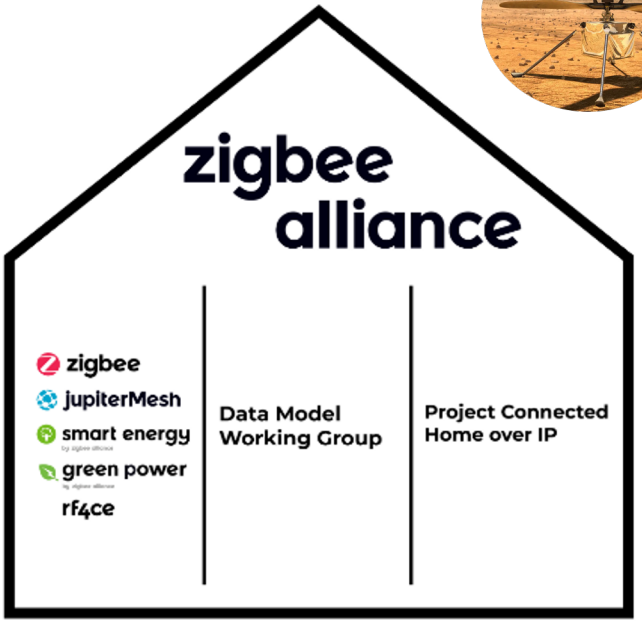
What you will hear today

- The Alliance brings together the world's most innovative companies to create and evolve technologies
- Project CHIP will be the single, IP-based, smart home connectivity standard unifying the IoT
- The comprehensive and resilient security approach of Project CHIP
- Testing begins now, certification begins Late 2021
- The Time Is Now. CHIP Is Progressing. Get Involved.

Zigbee Alliance grounded in strength

The Alliance is the foundation and future of the IoT. Since 2002, the Alliance's diverse global membership has collaborated to create and evolve universal open standards for the products that are transforming the way we live, work, and play.

- Driven by experienced global membership
- Robust and established certification programs
- Full suite of open IoT solutions



Project Connected Home over IP

To date, the initiative is supported by:

- 3 Project CHIP Sub Groups with 30+ subcommittees
- 180 Member organizations (of all sizes, across a range of business categories)
- 1,700+ Members who bring passion, patience and expertise to each conversation

To unify the IoT industry

The single, unified connectivity standard will catapult Smart Home technology from an emerging technology to mass household adoption, soaring past $53B USD by 2022*

Commercial is part of the roadmap.

CONSUMERS

- Increased choice & compatibility
- Simplified setup & control

DEVELOPERS

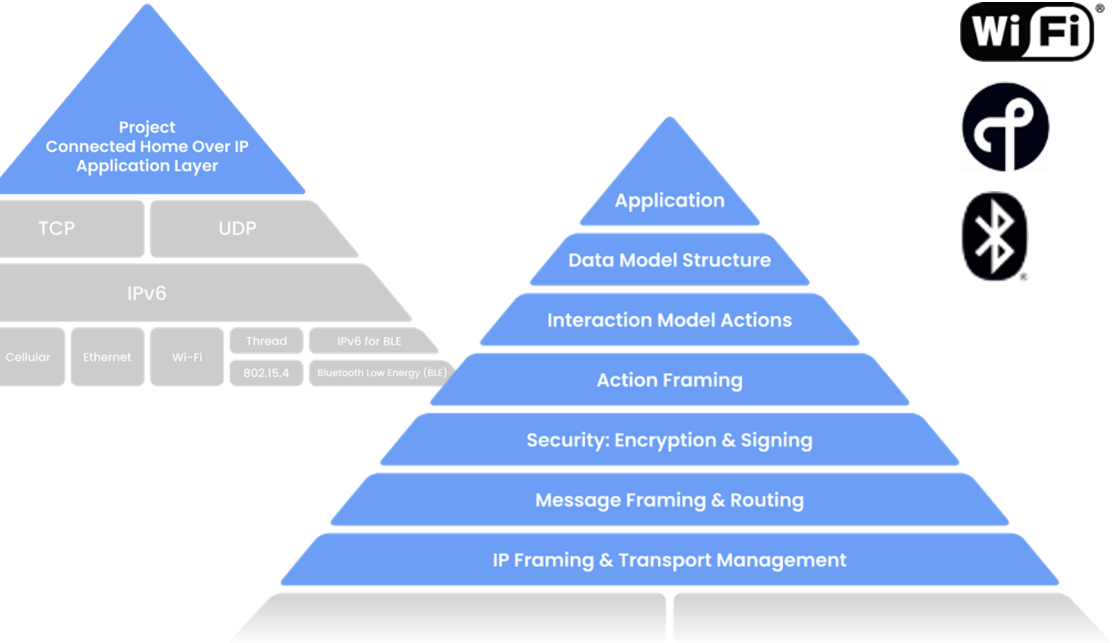
- Single SKU
- Lower development & operational cost
- More time for innovation

RETAILERS

- Minimized returns
- Simplified purchasing experience

* Statista, Global smart home market revenue 2016–2022, 2020

How we stack up



Common application layer + data model
Interoperability, simplified setup & control

IP-based
Convergence layer across all compatible networks

Secure
AES-128-CCM encryption with 128-bit AES-CBC

Open-source development approach
Based on market-proven technologies

Common protocol across device and mobile
Extendible to cloud

Common data model
Core operational functions, multiple device types

Low overhead
MCU-class compute, <128KB RAM, <1MB Flash

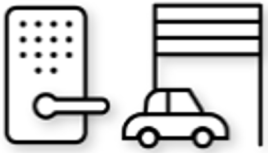
Target device types

Lighting, Electrical

Blinds/Shades

HVAC Controls

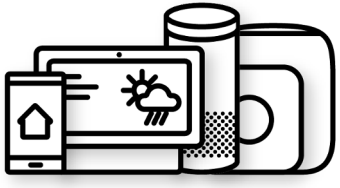
TVs



Access Control

Safety & Security

Access Points, Bridges



Connected Home over IP controllers can be implemented in a variety of devices and interfaces

Scoping exercises for additional device types and use cases underway and continual.

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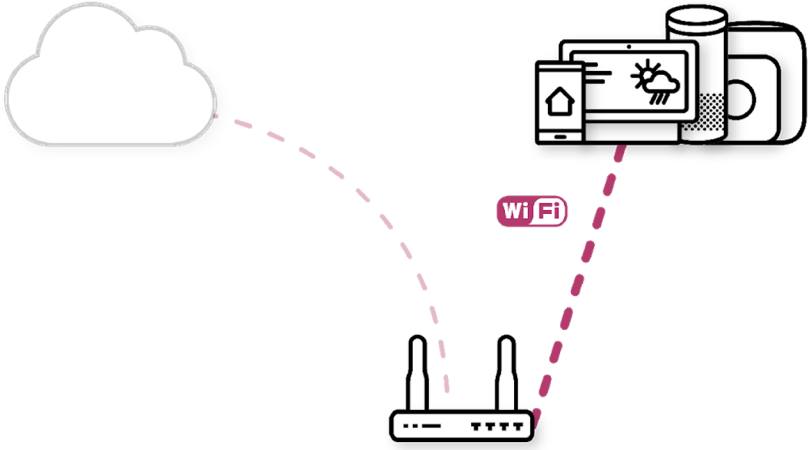
Network Topology

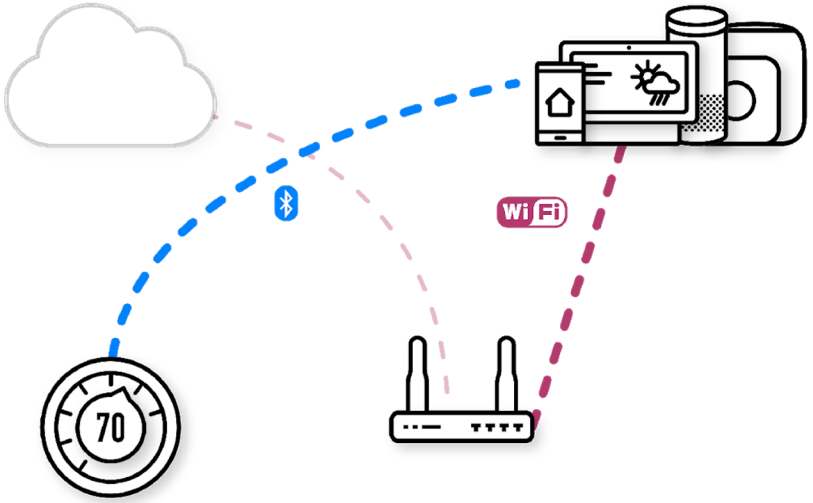
Network Topology

Controller connects
to Wi-Fi router



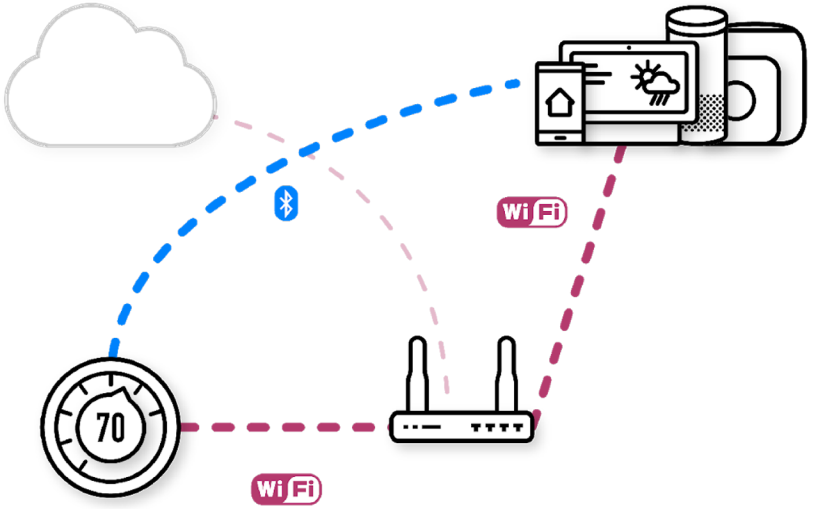
Network Topology

Controller
commissions device
via Bluetooth LE



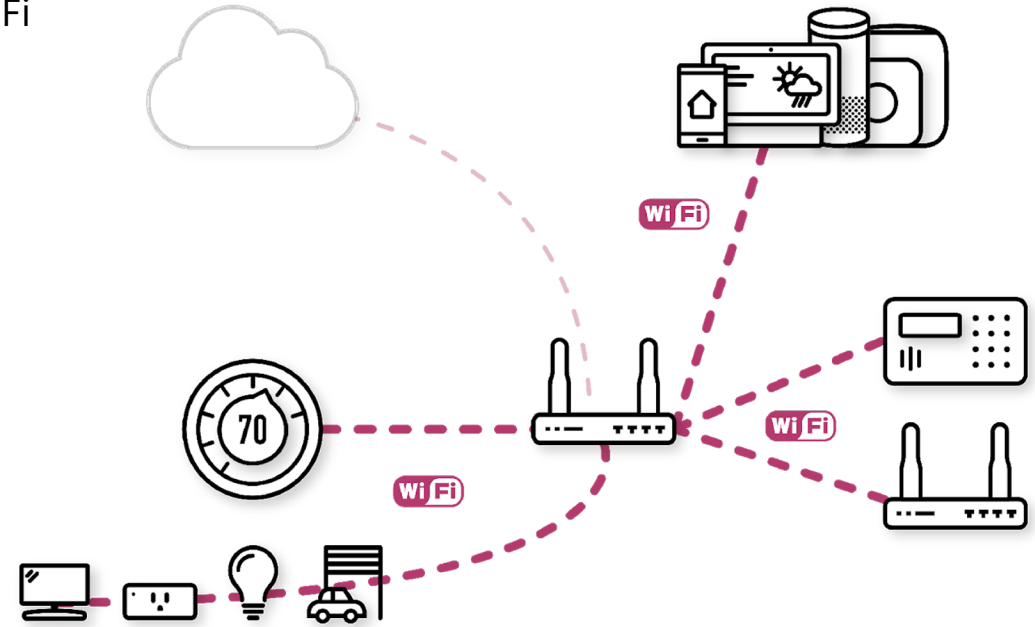
Network Topology

Device joins
Wi-Fi network



Network Topology

Additional CHIP devices
connected to Wi-Fi



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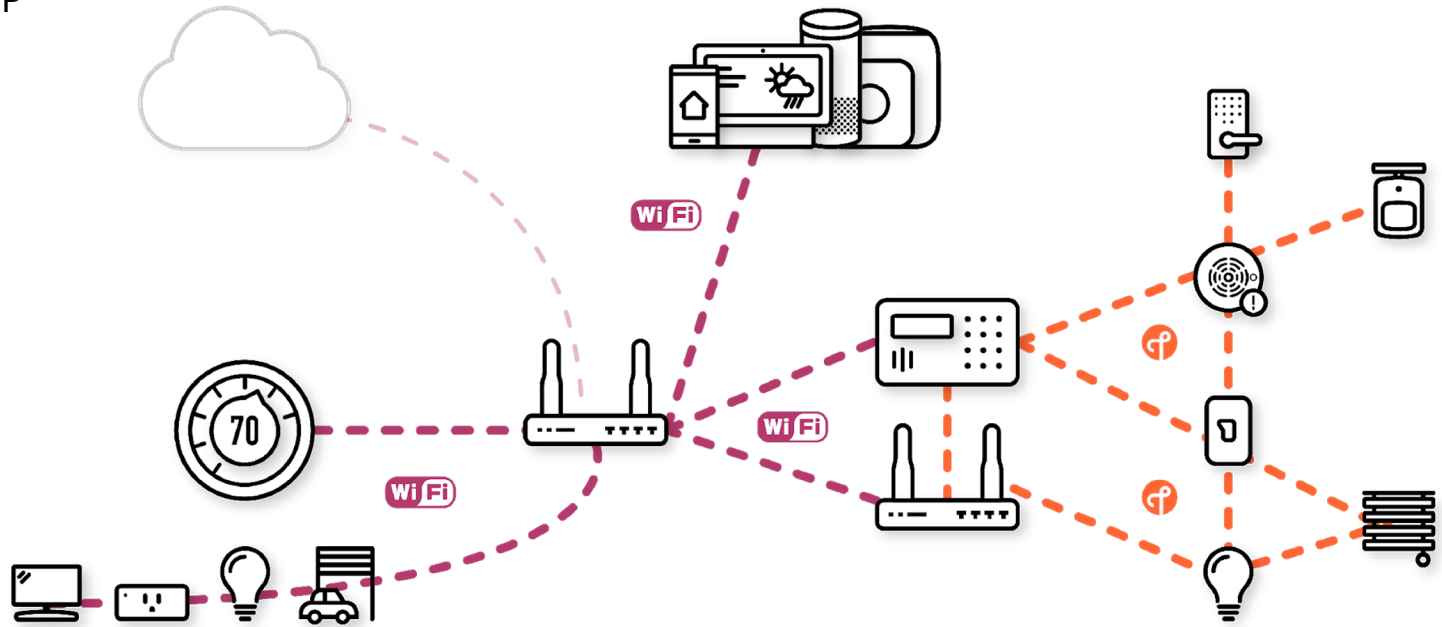
Network Topology

Thread devices connect to other IP networks through Border Routers



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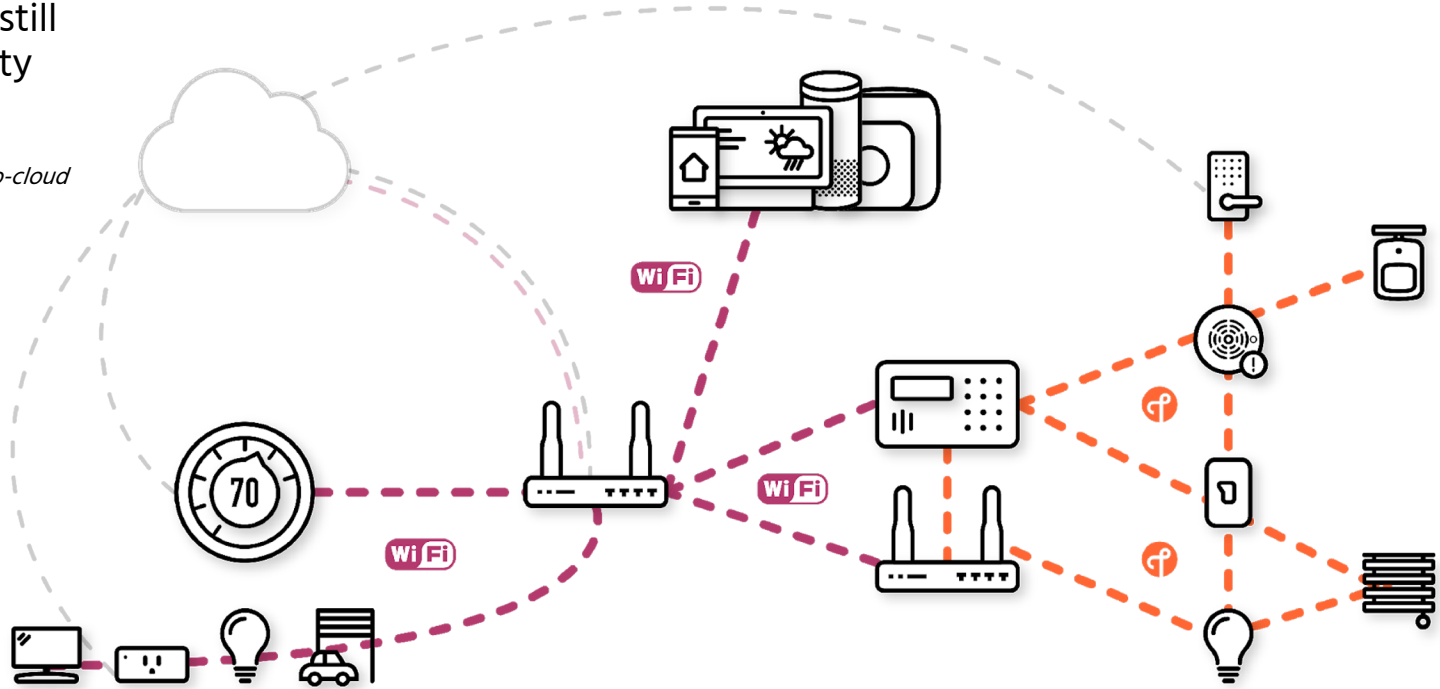
Network Topology

All IP devices can still connect to 1st party cloud devices*

** CHIP not used for device-to-cloud communication*



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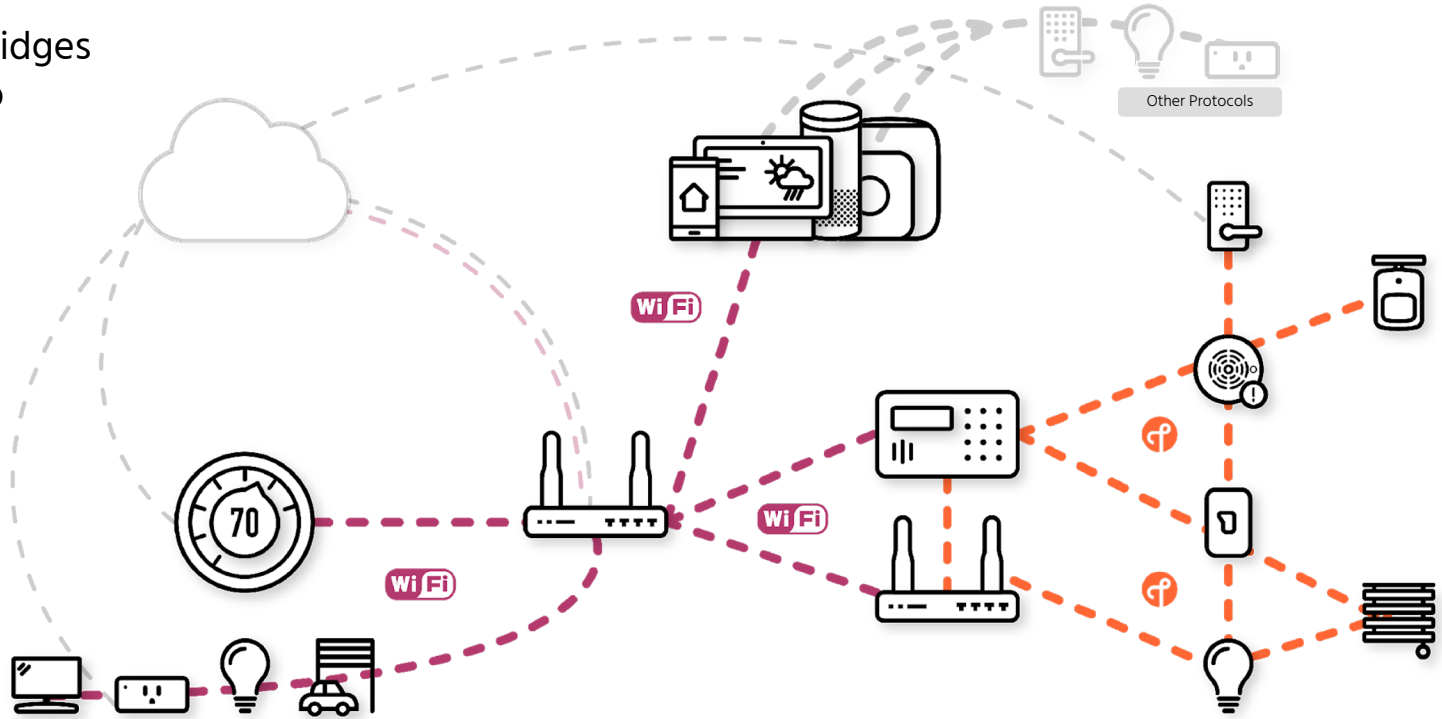
Network Topology

Controllers and Bridges can create links to other protocols



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Security & Privacy

Comprehensive
Layered approach

Strong
Well-tested standard cryptographic algorithms such as ECC NIST P256 & AES-CCM-128

Easy
Improve ease of use not decrease it

Resilient
Protect, Detect and Recover

Agile
With Crypto-flexibility in mind to address new developments and threats.

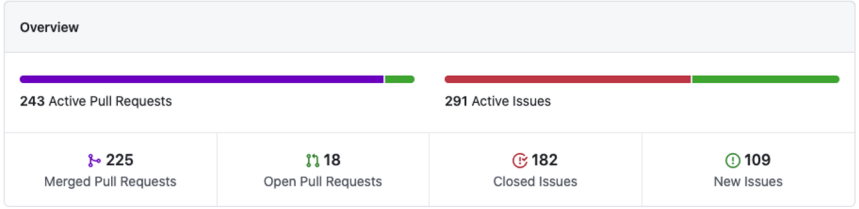
Open Source

Project CHIP open source project:
github.com/project-chip/connectedhomeip

Collaborative, open-source development
Accessible, transparent, robust, and secure. Code examples showing interactions on multiple transports.

Built on market-proven technologies
Companies from across the industry are contributing market-proven technologies and best practices.

Implementation-first approach
Growing to implement the overall architecture. Not just a technical spec, but deployable code.



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Certification and Testing

Progress
Targeting formal certification program launch in late 2021

Tooling and Infrastructure
Easily accessible and free to use for all members. Designed with automation and testability in mind for easy integration into vendors' testing processes.

Test events
Test event series started in March and continues through September. Active participation from dozens of device makers and chipset vendors.

Participants successfully completing the test events, will be the first to receive certification.

Join now, to be part of the first group of certified devices, or wait until the specification is released and formal certification opens in late 2021.

Looking ahead

Draft tech specifications available to Members

Test and Certification

1st Products Certified

Note: Preliminary timeline, subject to change

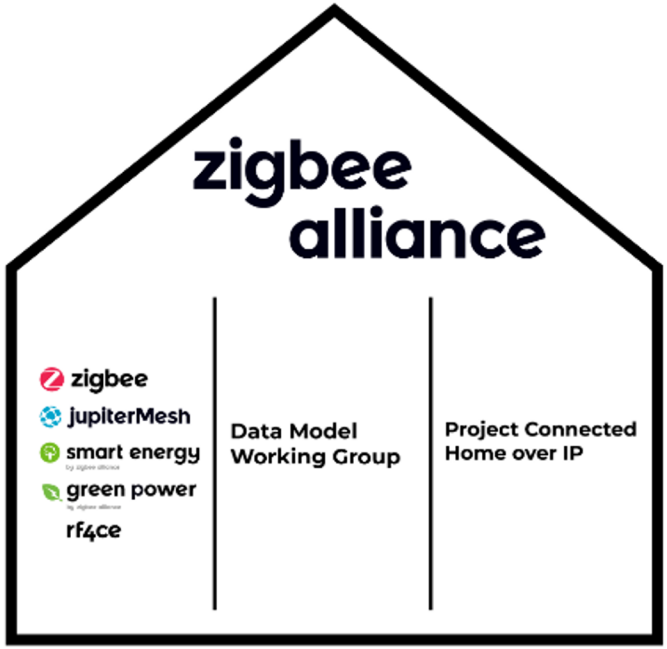
Build the future of the IoT

Join the Zigbee Alliance!

Visit:
www.zigbeealliance.org

www.connectedhomeip.com

Learn more:
help@zigbee.org



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Q & A