

zigbee's dotdot makes IoT edge devices interoperable with multiple RF connectivity support

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The zigbee® alliance recently introduced dotdot, a universal language for Internet-of-Things (IoT) that works on application layer to enable communication across different networking technologies. It can be seen as an extension of the zigbee® Cluster Library (ZCL) specification used to issue commands across zigbee® 3.0's interoperable application layer. In addition to the application layer remaining slim, however, dotdot has also been made compatible with other networks for communication across different mediums, with Thread being the first non-zigbee® qualified network topology for dotdot. dotdot makes smart homes and businesses work for everyone.

dotdot Use Cases

Even though zigbee® is best known as an open wireless communications protocol used in many home IoT products, dotdot is intended for use with any wireless technology. It defines how devices communicate with each other about what they can do, which is important for making different objects around a home do things together. For example, if a bulb is installed in the backyard and one wants it to turn on whenever the back door is opened, the connected lock or sensor in the door will need to know that such a bulb is out there and can send commands to it. dotdot is more mature than other application layers because its language relies on ZCL (zigbee® Cluster Library). The ZCL can work with devices using the Wireless Thread protocol.

Benefits

dotdot extends zigbee® 's reach and provides Thread with a rich application layer. Thread can also be used with other application layers, but if used to communicate with other dotdot devices, then they will use the dotdot application layer. This approach provides IoT and embedded developers with more options in addition to making connections between different underlying networks easier. It gives product developers the freedom to choose the network that works for their application, and consumers the freedom to choose the brands and products that transform the way they live, work and play.

- Slim Application Layer reducing lines of code
- dotdot is compatible with other networks to allow communication across disparate transports
- zigbee® based devices will be able to communicate with IP based devices residing on Thread mesh network.
- ZCL remains consistent, any new device type added, it can be used across all networks that dotdot supports.

Related Implementations

We at VOLANSYS have worked upon multiple Wireless and RF connectivity like BLE, Wi-Fi, 3G, NFC, Thread and zigbee® clusters including Basic, Identify, Groups, Scenes, On/Off, On/Off Switch Configuration, Level Control, IAS Zone, Touchlink Commissioning, Partition, Color Control, Illuminance measurement, Illuminance level sensing, Occupancy sensing, Power configuration,

Liquid Detection, Device temperature configuration, Alarms, Time, Power Profile, Poll control, Shade configuration, Temperature measurement, Relative humidity measurement. For more details visit us at <https://volansys.com/case-studies> .

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