GadgEon

Engineering Smartness
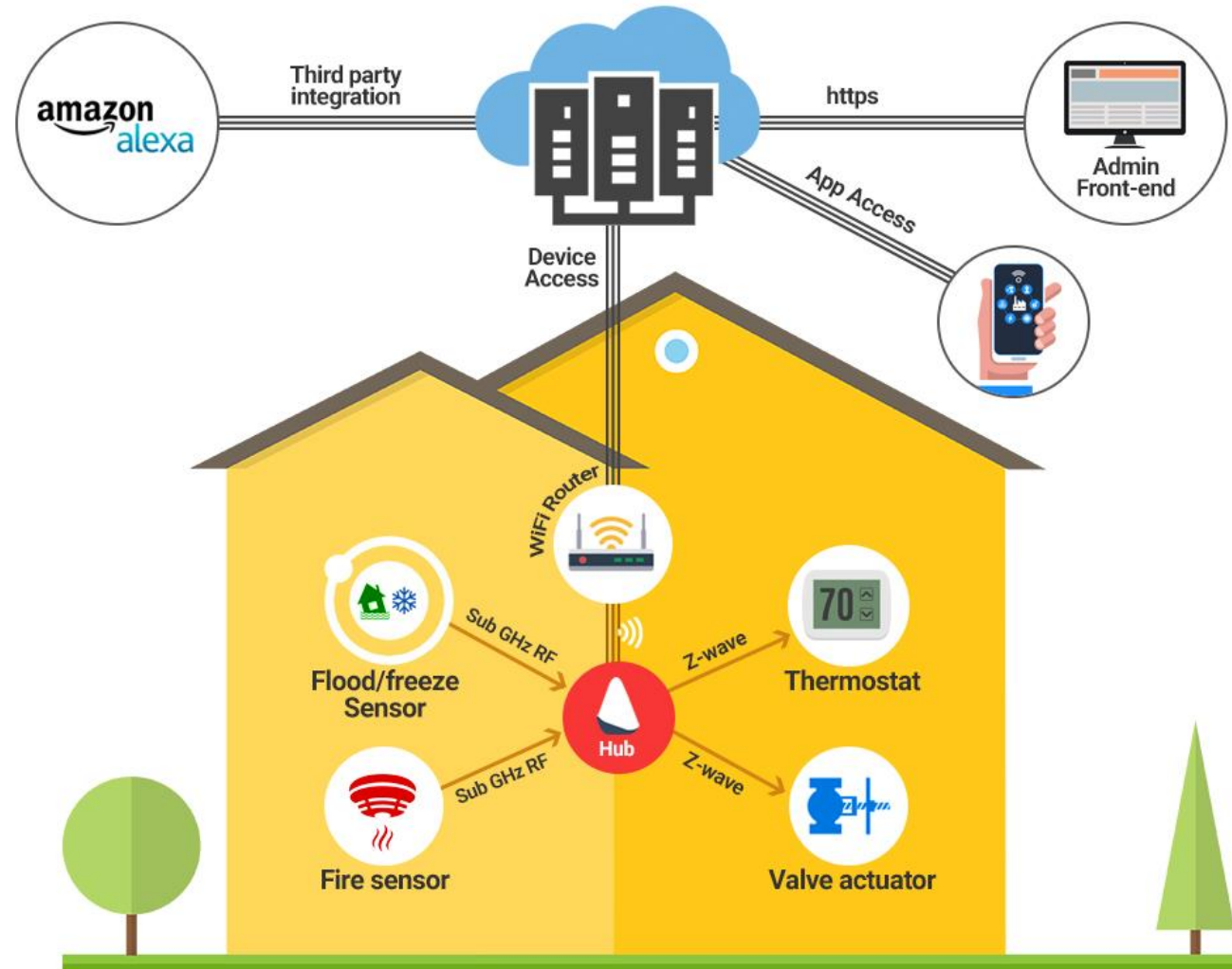
HOME SECURITY SOLUTION

Home Security Solution

Worldwide leader in universal control and sensing technologies wanted an ultra low cost IoT gateway with associated cloud and mobile application for securing home against fire, flood and freeze.

Results / Outcomes

- The homeowner would receive notifications if there was a water (flood), temperature (freeze), or fire (smoke detector) event. By receiving notification early, they can thus take action and prevent a catastrophic event from occurring possibly.
- In the case of flood or freeze events, the home owner can take action from their mobile app by shutting of the water valves and thermostat.
- Installing the system may allow home owner rebate on a portion of their homeowners insurance policy cost.
- Heavily optimized solution to reduce number of messages and cost
- Highly scalable cloud application to support millions of Hubs

System Overview

System Description

The home security system consist of various components to achieve the desired benefits.

Cloud application:

Customized DelCloud for cloud application. The hub will intimate the events to cloud via MQTT protocol. The cloud will intimate the event details to the users via Text, email or Push notification. REST API is used to communicate cloud and mobile apps.

Administrator UI is supported by the cloud. It has the functionalities of user and hub management, firmware upgrade etc.

Hub:

Gadgeon designed an ultra low cost hardware based on MT7688 chipset capable of running OpenWRT Linux. Gateway supports ethernet and WIFI interfaces for communication with home router. Gateway supports 433MHz radio and Z-wave for sensor communication.

433MHz based sensor nodes detect events like fire, flood and freeze and communicate that to the Hub. The hub informs the event to the cloud which notifies the users.

iOS & Android mobile apps

Mobile app alerts users of the events using APNS and FCM push notifications. The app allows users to control valves and thermostats. Mobile app also helps the user to set up the hub and sensors/actuators by guiding through each step of the installation process. The app communicates directly with Hub over WIFI for initial configuration. REST API calls are used in this process.

THANK YOU

For More Details, Let's Connect

Gadgeon Systems Inc.
881 Yosemite Way, Milpitas, CA 95035, USA

CONTACT - USA
Mani Ram - Vice President - Solutions and Technology
📞 +1-678-900-0874 | ✉ mani.ram@gadgeon.com

Gadgeon Smart Systems Pvt Ltd.
Vl 405/E1, Fathima Tower, Maleppally Road, Thrikkakara PO, Kochi, Kerala, PIN: 682021, India

CONTACT - INDIA
Hari Nair - CEO: +91 9895 01 58 80
📞 +91 989-501-5880 | ✉ hari.nair@gadgeon.com

Gadgeon Europe
Antwerpsesteenweg 124/54, 2630 Aartselaar, Belgium
📞 +32 475 23 39 46 | ✉ europe@gadgeon.com

✉ **sales@gadgeon.com**