



## HCL'S **INTERNET OF THINGS** STACK FOR GATEWAY HELPS INDIAN CONTROL PANEL MAKER AND SYSTEM INTEGRATOR TO WIRELESSLY ENABLE THEIR DEVICES



### THE CLIENT

The client is an Indian company involved in design, development and manufacturing of Touch Controls, Automation devices and Gateways. The company has been operating in the field of Lighting controls, Home Automation, Security and Energy saving solutions for Homes, Hotels, offices and commercial establishments.



### BUSINESS OBJECTIVE

The client is manufacturing the proprietary protocol devices connected with RS-485. The customer is also into installation of home automation system in different sites. The existing solution was working with their wired devices. Customer wanted to

- Enhance the end user experience by providing a mobile interface and also providing the feature for remote access and control.
- Adopt new wireless devices in the solution
- Transform proprietary protocol based wired devices into wireless devices.
- Support increased number of connected devices (existing solution could connect few tens of devices only).



### HCL IOT STACK FOR GATEWAY

HCL's IoT stack is Modular, Scalable, Extendable and reliable framework for gateway/aggregators those can be deployed in different business verticals like smart home, security surveillance, industrial, health and assisted living, energy monitoring, etc. It enables the connectivity with different heterogeneous protocols for devices and cloud platforms. This stack is lightweight and ported on different software and hardware platforms.

### The main features are:

- Device control and monitor: Controlling the devices like lights, HVAC, curtain controllers and also monitoring the sensor status etc.
- Integration with multiple sensors and industry equipment – Actuators, motion sensors, temperature, pressure sensors, IP Cameras, RFID readers, noise sensors, pulse oxy meters etc.
- Event Action Capability: Dynamically configurable events and actions like Buzzer sound action in case of motion detection event etc.
- Alarms configuration: Activate/Deactivate and reset alarms
- Scenes: Record the set of device status like lights, load controllers, etc. and can execute them with single button.
- Scheduler functionality: Switching On/Off of the devices as per the configured schedule
- Features can be triggered from Smart watch, mobile phones /Tablet Applications
- Support for e-mail , SMS based notifications



### HCL'S APPROACH & SOLUTION

- HCL's IOT Gateway (both hardware and software) used as a base platform.
- Customer specific features added / customizations done (e.g. support for additional sensors added, customer's proprietary protocol parsers added)
- Prepared the ZigBee combo device (ZigBee – RS485 converter) to transform wired devices into wireless devices

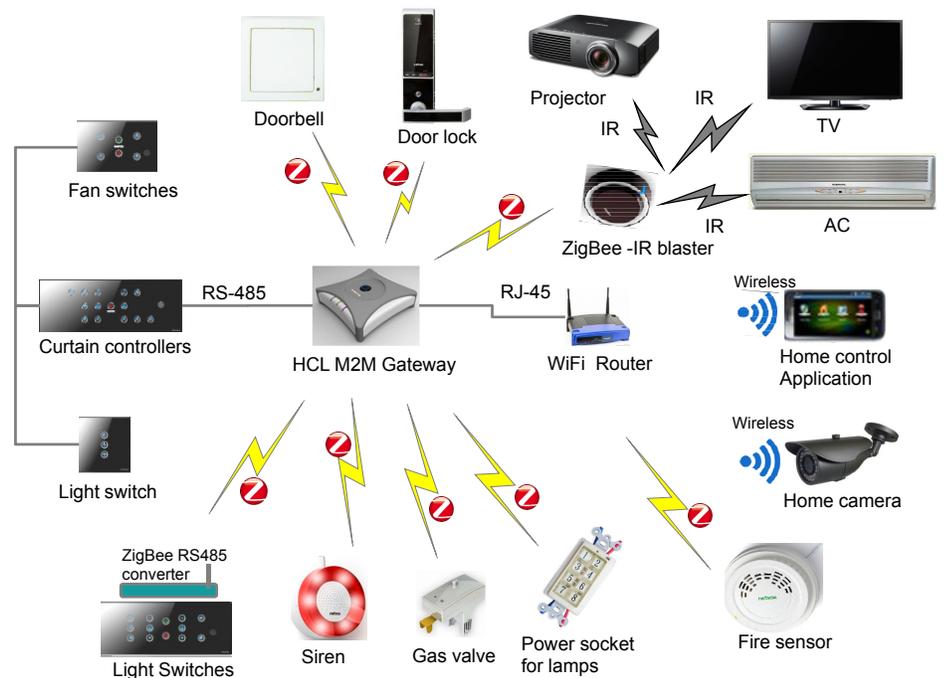


Figure 1. Solution deployment using HCL IOT Gateway



## CUSTOMER BENEFITS

- Next generation features additions – remote control of home devices, UI on tablet / mobile phones.
- Continued support for legacy devices along with new wireless devices
- Time to market savings of around 50%
- Cost reduction by approx. 60%



[www.hcltech.com](http://www.hcltech.com)

**Hello there! I am an Ideapreneur.** I believe that sustainable business outcomes are driven by relationships nurtured through values like trust, transparency and flexibility. I respect the contract, but believe in going beyond through collaboration, applied innovation and new generation partnership models that put your interest above everything else. Right now 110,000 Ideapreneurs are in a Relationship Beyond the Contract™ with 500 customers in 31 countries. **How can I help you?**

*Relationship*<sup>™</sup>  
BEYOND THE CONTRACT

**HCL**