Home Security Example

# Overview

This project was created to show off some fun things you can do to get started in the Internet of Things craze. This project was never intended to be an actual working Home Security system so don’t try and use it for that unless you really think about addressing some of the internet security issues that need to be tackled with a project like this. Please use this code as examples only!

Each device that is connected to the central hub of the security system perform a specific task of the home security functionality. In a real security system you probably wouldn’t have mission critical devices dependent on external connectivity to the cloud that could easily be disconnected. Again this is just a fun example to get you thinking about connecting many devices together.

# Functionality

## Cloud Service

The cloud services are really made up of a web role and a background worker role. This solution

### Central web site

The web site is hosted in an Azure Web Role.

### Central Hub

The hub that all devices connect to is hosted in an Azure Worker Role

## Devices

The devices for this example are focused around the Netduino Plus but since the protocol used for the communications is standard an Arduino (or other Ethernet/wifi based hardware) could be used. Each device performs a function of the Home Security System.

Each device is uniquely identifiable on the network so it is easy to send messages to them without having to hardcode the IP address.

### Bedrooms

Example bedrooms identities might be Master Bedroom, Bedroom 1, or Bedroom 2. Although you should be able to technically support up to N bedrooms in the system in this example we only support 3 bedrooms to make it easy to manage on the central web site.

### Alarm

### Door Bell

### External door access

### Garage

### Ground Floor

# Getting setup

TODO