## How to

1. Install OpenHabian on Raspberry Pi
   1. Update & Upgrade System
   2. Change password of Sudo(Optional but recommended)
   3. Enabling SSH(Optional but recommended)
   4. Enabling Mosquitto Server
   5. Test Accessing “http://openhab:8080/”
2. In OpenHab Paper UI
   1. Install Mqtt Binding(2.X)
   2. Install Amazon Alexa Binding
      1. Register in <https://myopenhab.org/login> l with UUID and Secret:
         1. (Terminal UUID)cat /var/lib/openhab2/uuid && echo
         2. (Terminal Secret)cat /var/lib/openhab2/openhabcloud/secret && echo
      2. Connect with Amazon echo(Skill=openHab)
      3. Connect with Google Assistant (Skill = openHab)
3. (Terminal) sudo nano /etc/openhab2/things/mqtt.things

Bridge mqtt:broker:mqtt\_broker [

host="127.0.0.1",

secure=false,

port=1883,

qos=0,

retain=false,

clientid="Oh2MqttClient",

keep\_alive\_time=30000,

reconnect\_time=60000,

username="<User>",

password="<PassWord>"

] {

Thing topic mqtt "MQTT" {

Channels:

Type switch : BoysMain "BoysMain" [

commandTopic="SmartHome/Rooms/Boys/Main",

stateTopic="SmartHome/Rooms/Boys/Main/state",

on="ON",

off="OFF"

]

Type switch : BoysBath "BoysBath" [

commandTopic="SmartHome/Rooms/Boys/Bathroom",

stateTopic="SmartHome/Rooms/Boys/Bathroom/state",

on="ON",

off="OFF"

]

Type number : Sensor "Sensor"[

stateTopic="SmartHome/sensor",

unit="ºC"

]

Type rollershutter : Roller "Roller"[

commandTopic="SmartHome/Roller",

stateTopic="SmartHome/Roller/state",

on="ON",

off="OFF",

stop="STOP"

]

Type colorRGB : led "led"[

commandTopic="SmartHome/led",

stateTopic="SmartHome/led/state",

]

}

}

To add more

Type <Channel> : <ID> "<Name>" [

commandTopic="<Topic>",

stateTopic="<Topic/state>",

<Channel Parametres>

]

Channels and Parametres: <https://www.openhab.org/addons/bindings/mqtt.generic/>

1. (Terminal) sudo nano /etc/openhab2/items/home.items

Switch BoysMain "My Room" <Light> ["Lighting"]{ channel="mqtt:topic:mqtt\_broker:mqtt:BoysMain"}

Switch BoysBath "My Bathroom" <Light> ["Lighting"] { channel="mqtt:topic:mqtt\_broker:mqtt:BoysBath"}

Number mqtt\_sensor "Sensor [%.2f ºC] <Temperature> {channel="mqtt:topic:mqtt\_broker:mqtt:Sensor}

Rollershutter Roller "Roller" <rollershutter> ["Switchable"] { channel="mqtt:topic:mqtt\_broker:mqtt:Roller"}

Color led "led" <colorlight> [ "Lighting" ] { channel="mqtt:topic:mqtt\_broker:mqtt:led"}

To add more

<Type> <id> “<Name>” <Category> [“<AmazonType>”] {channel:” mqtt:topic:mqtt\_broker:mqtt:<ID>”}

 The amazon echo supports the following tags:

[ “Switchable” ] This tag is used with the Switch item type, Dimmer item type, Color item type, as well as the Rollershutter item type, but you would not use this for a light that is what the next one is for.

[ “Lighting” ] This tag is used for lights with the Switch item type, Dimmer item type, and the Color item type.

[ “CurrentTemperature” ] This tag would be used with a device that reports temperature and has the Number item type.

[ “Thermostat” ] This tag is used with an item that has a Group item type and has the following devices in the Group

[ “CurrentTemperature” ]

[ “TargetTemperature” ]

[https://www.openhab.org/docs/configuration/items.html#type](https://www.openhab.org/docs/configuration/items.html" \l "type)

1. (Terminal) sudo nano /etc/openhab2/sitemaps/home.sitemap

sitemap home label="Smart Home"{

Frame label="My Room"{

Switch item=BoysMain label="light"

Switch item=BoysBath label="light"

Text item=mqtt\_sensor label="temperature"

Switch item=Roller label="rollershutter"

Colorpicker item=led

}

}

 To add more

<Type> item=<id> label=”<label>”

[https://www.openhab.org/docs/configuration/sitemaps.html#element-type-group](https://www.openhab.org/docs/configuration/sitemaps.html" \l "element-type-group)

### Raspberry

1. Edit config.json accordingly
2. - Scripts DOC -