



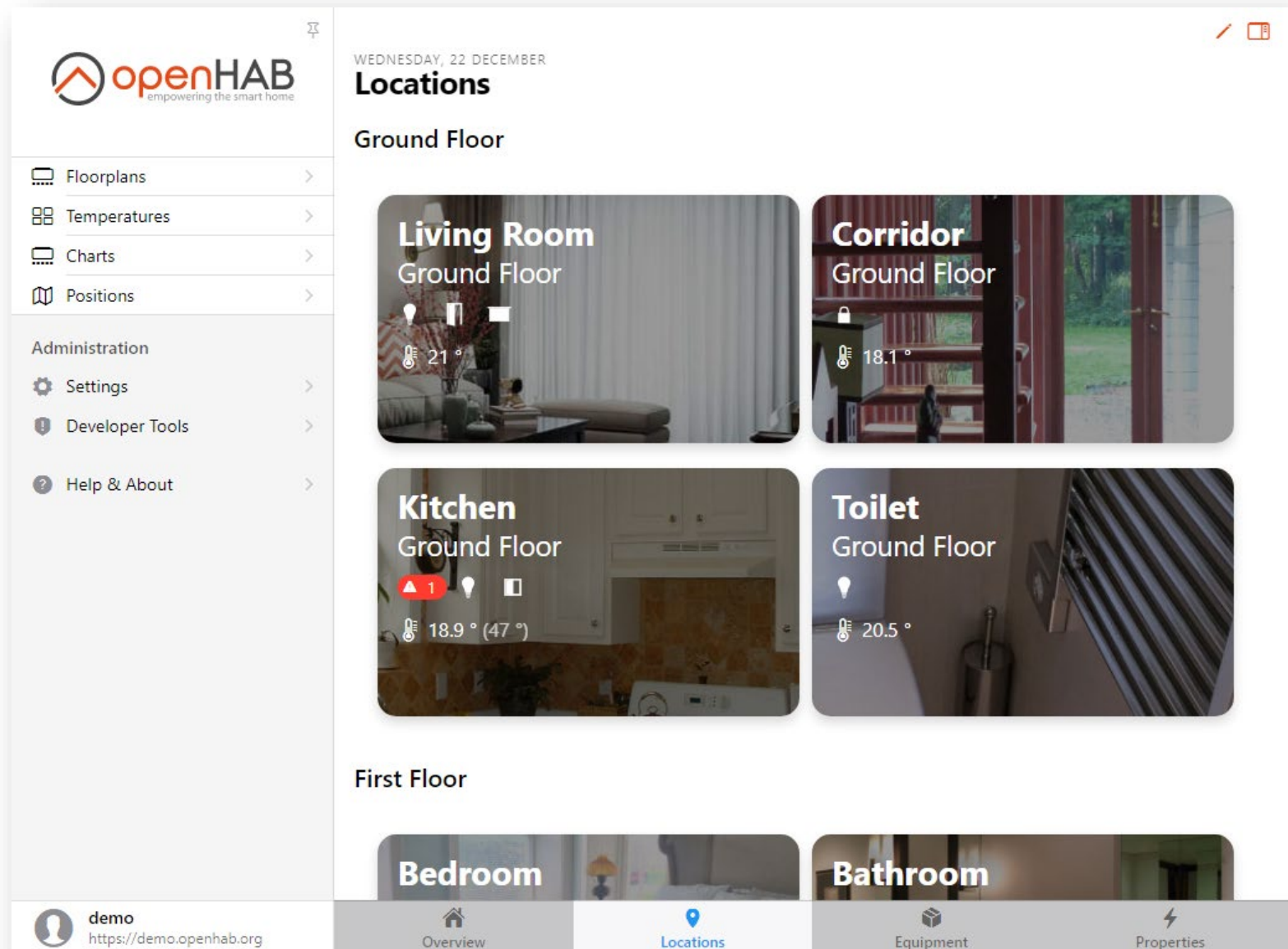
Universidad Politécnica de Madrid

Uso del IoT para construir tú mismo un hogar digital

La interfaz Basic UI de openHAB

Javier Malagón

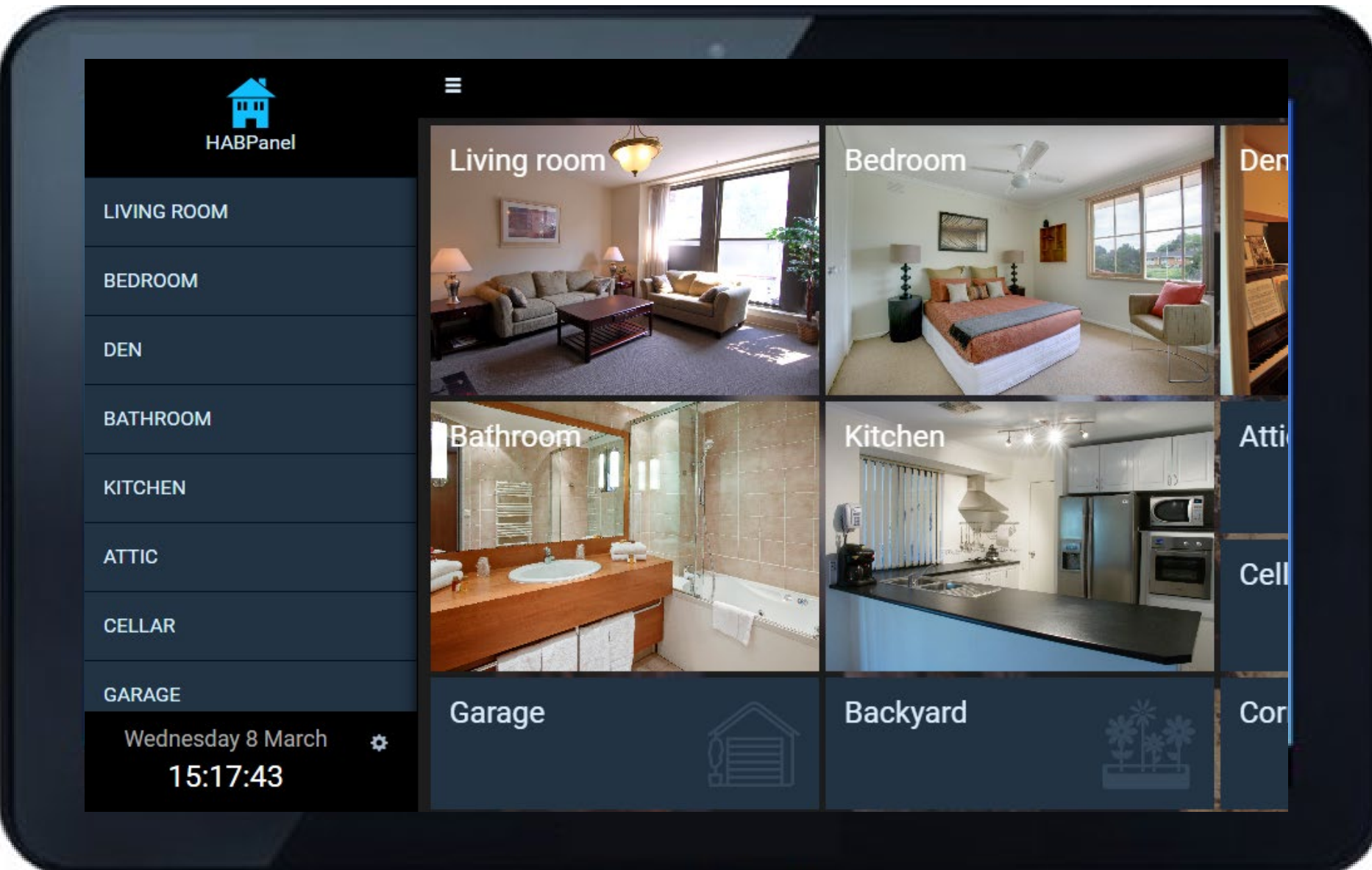
# Las interfaz principal de openHAB



The screenshot displays the openHAB mobile application interface. On the left is a navigation sidebar with the openHAB logo and menu items: Floorplans, Temperatures, Charts, Positions, Administration, Settings, Developer Tools, and Help & About. The main content area shows the date 'WEDNESDAY, 22 DECEMBER' and the title 'Locations'. Below this, the 'Ground Floor' section contains four location cards: Living Room (21 °C), Corridor (18.1 °C), Kitchen (18.9 °C / 47 °F), and Toilet (20.5 °C). The 'First Floor' section is partially visible at the bottom, showing 'Bedroom' and 'Bathroom' cards. A bottom navigation bar includes 'Overview', 'Locations' (selected), 'Equipment', and 'Properties'. A user profile 'demo' is shown in the bottom left corner.

<https://demo.openhab.org/>

# La interfaz HABPanel



# La interfaz HABPanel



Fuente: <https://www.openhab.org/docs/ui/habpanel/habpanel.html>

# La interfaz Basic UI

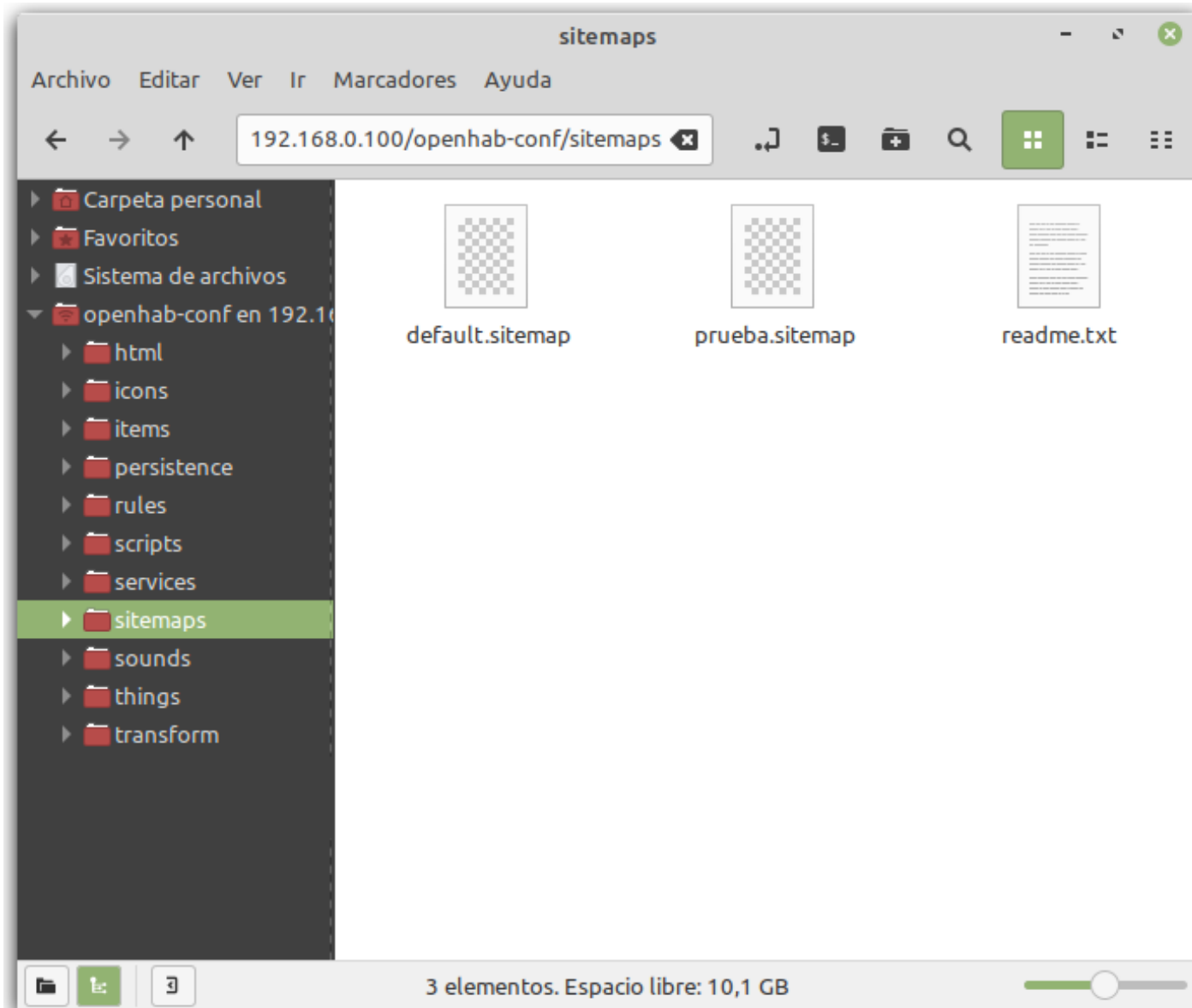


POLITÉCNICA

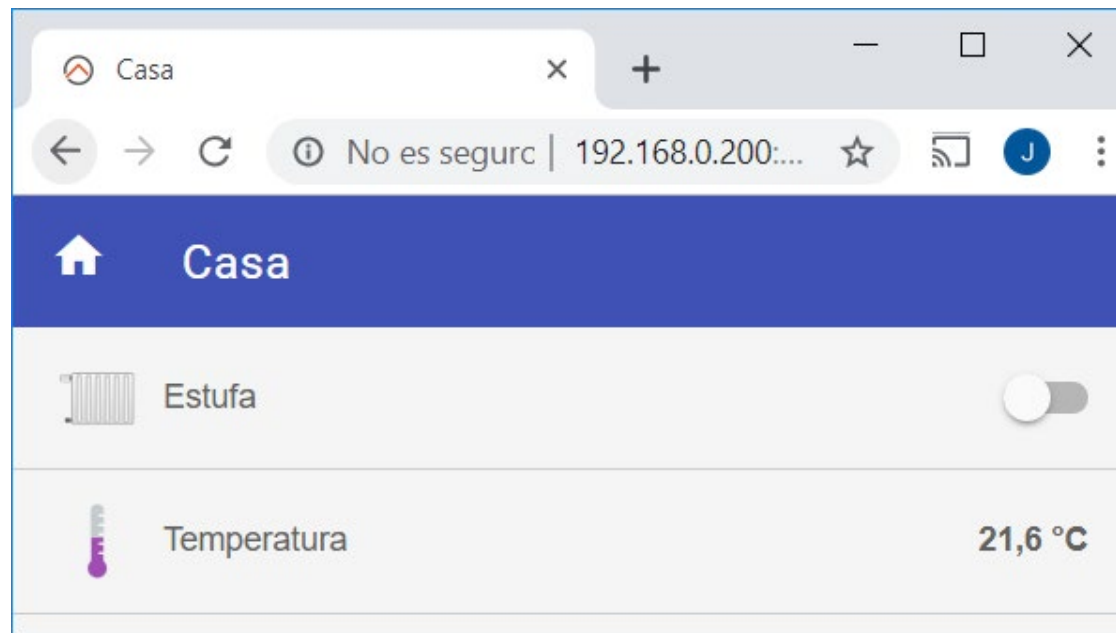


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# La interfaz Basic UI



```
sitemap default label="Casa"  
{  
  Default item=Salon_EnchufeEstufa icon="radiator"  
  
  Text item=Salon_SensorTemperatura icon="temperature"  
}
```



# Video: navegación por el sitemap *demo*

## ↑ Main Menu



First Floor



Ground Floor



Cellar



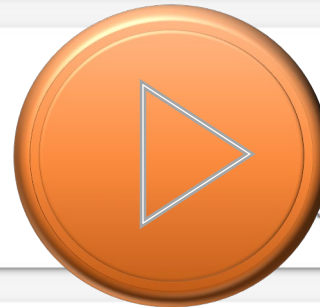
Garden



## Weather



Outside Temperature



Astronomical Data



## Demo



Date



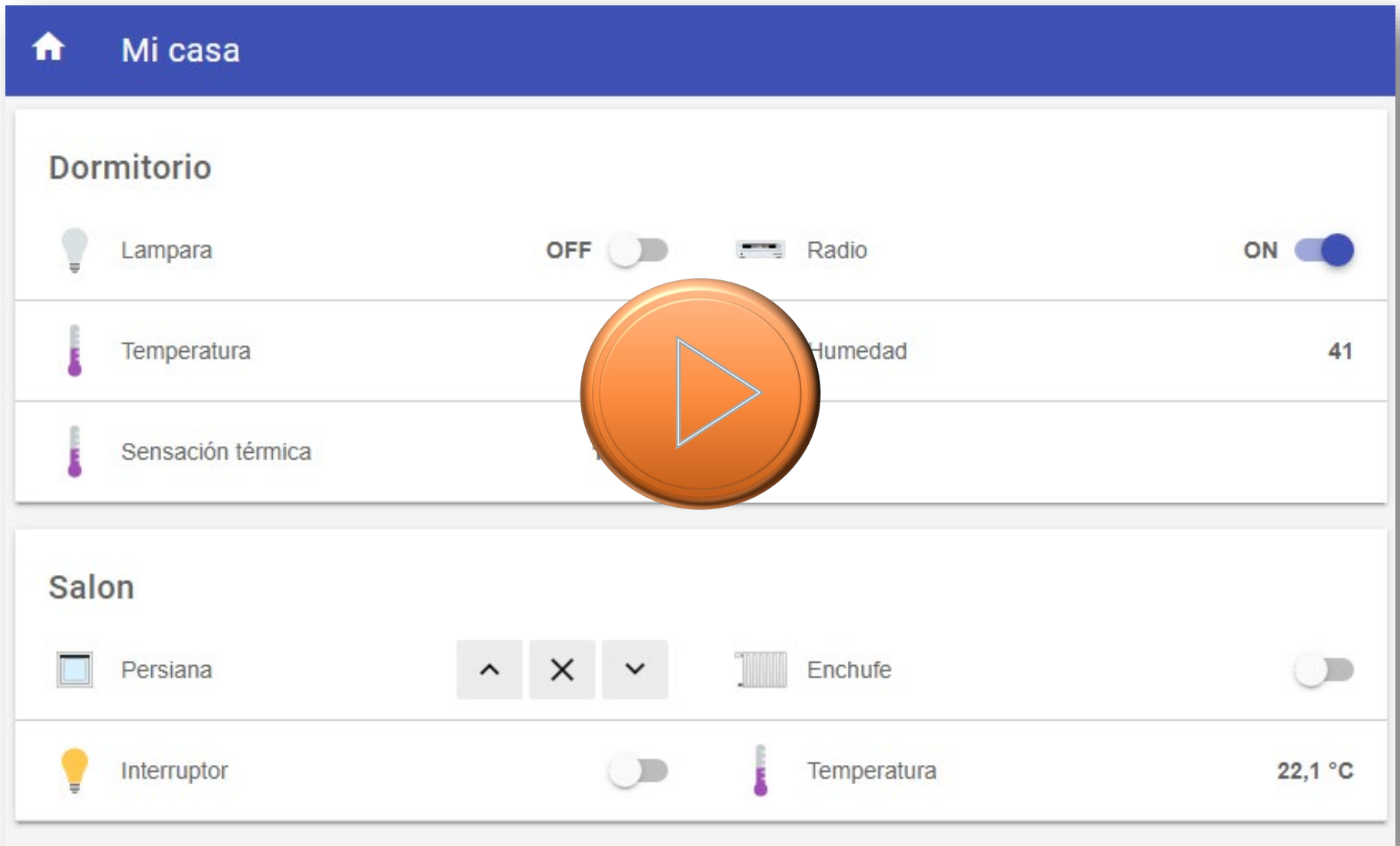
Group Demo



Widget Overview



# Creación del sitemap con ficheros



The screenshot shows a mobile application interface for a smart home system. At the top, a blue header bar contains a home icon and the text "Mi casa". Below this, the interface is divided into two main sections: "Dormitorio" and "Salon".

**Dormitorio**

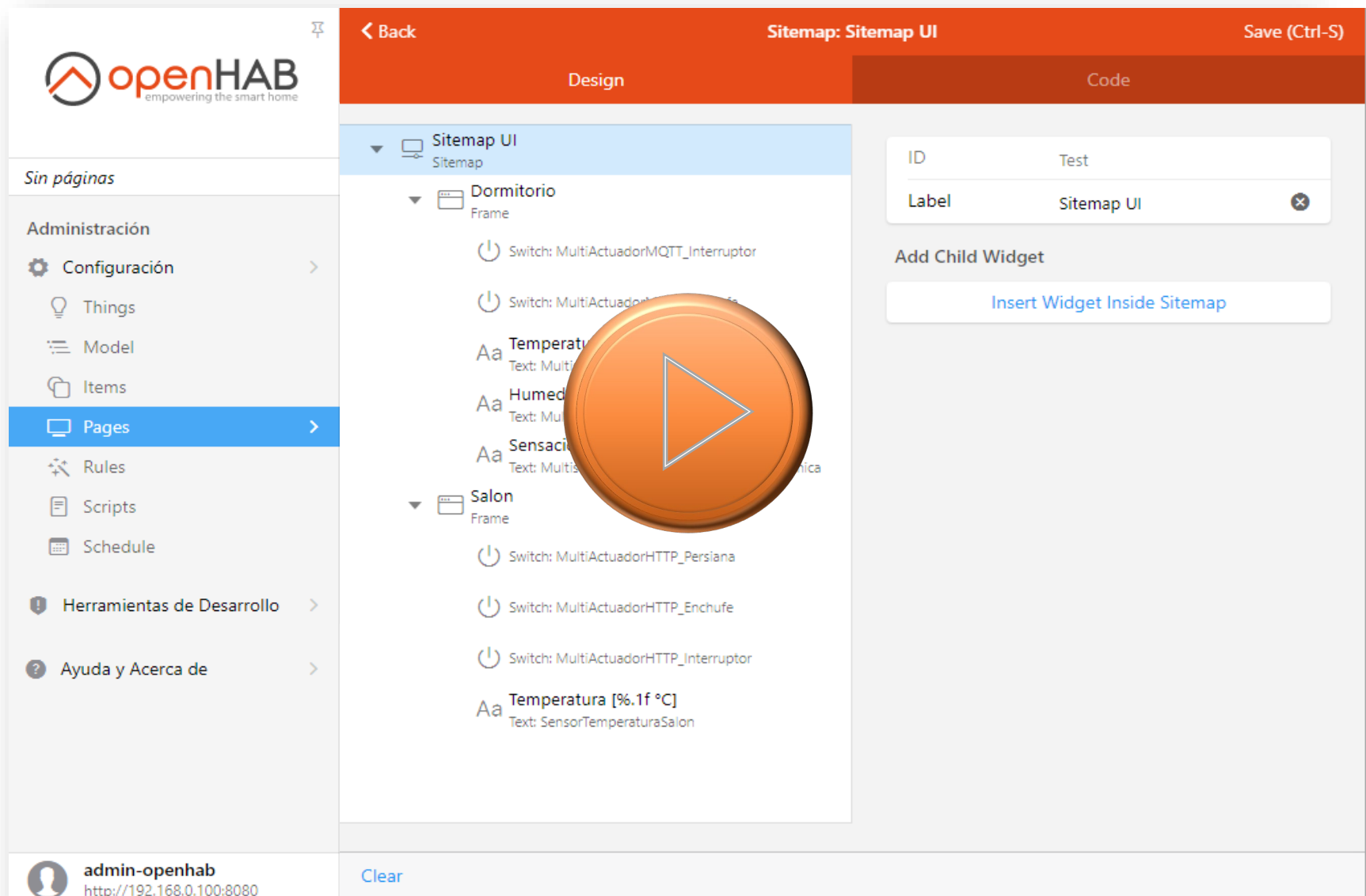
- Lampara:** A lightbulb icon, the label "Lampara", and a toggle switch set to "OFF".
- Radio:** A radio icon, the label "Radio", and a toggle switch set to "ON".
- Temperatura:** A thermometer icon, the label "Temperatura", and a value of 22.1.
- Humedad:** A humidity icon, the label "Humedad", and a value of 41.
- Sensación térmica:** A thermometer icon, the label "Sensación térmica", and a value of 22.1.

**Salon**

- Persiana:** A window blind icon, the label "Persiana", and three control buttons: an up arrow, a close 'X', and a down arrow.
- Enchufe:** A radiator icon, the label "Enchufe", and a toggle switch set to "OFF".
- Interruptor:** A lightbulb icon, the label "Interruptor", and a toggle switch set to "OFF".
- Temperatura:** A thermometer icon, the label "Temperatura", and a value of 22,1 °C.

A large, semi-transparent orange play button is overlaid in the center of the "Dormitorio" section.


# Creación del sitemap mediante la UI



The screenshot shows the openHAB web interface for editing a Sitemap. The left sidebar contains navigation options: Sin páginas, Administración, Configuración, Things, Model, Items, Pages (highlighted), Rules, Scripts, Schedule, Herramientas de Desarrollo, and Ayuda y Acerca de. The main area is titled 'Sitemap: Sitemap UI' and has two tabs: 'Design' (active) and 'Code'. The Design tab shows a tree view of the Sitemap structure with two frames: 'Dormitorio' and 'Salon'. The 'Salon' frame contains several widgets: three switches and a temperature text widget. A large orange play button is overlaid on the 'Salon' frame. The right sidebar shows the 'Code' tab with a table for widget properties:

ID	Test
Label	Sitemap UI

Below the table is a section 'Add Child Widget' with a button 'Insert Widget Inside Sitemap'. At the bottom left, the user 'admin-openhab' is logged in from 'http://192.168.0.100:8080'. A 'Clear' button is at the bottom left of the main area.



empowering the smart home

Sin páginas

Administración

- Configuración >
- Things
- Model
- Items
- Pages
- Rules
- Scripts
- Schedule

Herramientas de Desarrollo >

Ayuda y Acerca de >

admin-openhab  
http://192.168.0.100:8080

< Back

## Settings

### Configuration

- Things** 5 >  
Manage the physical layer
- Model** >  
The semantic model of your home
- Items** 15 >  
Manage the functional layer
- Pages** 2 >  
Design displays for user control & monitoring

### Automation

- Rules** >  
Automate with triggers and actions
- Scripts** >  
Rules dedicated to running code
- Schedule** >  
View upcoming time-based rules

### Add-ons

- Automation** >  
Scripting languages and module types for rules
- Bindings** >  
Connect and control hardware and online services
- Misc** >  
Integrations to external systems and more

### System Services

- Configuración regional >
- Configuración de red >
- Audio >
- Efemérides >
- API Security >
- Administración de complementos >
- Persistence >
- Almacenamiento Json >
- Inbox >
- Charts >
- Sitemap >
- Voz >

### Other Services

- Rule Voice Interpreter >
- Language Server (LSP) >
- System MQTT Broker >

# Configuración basada en archivos



< Settings

Rules

Select

Q Search

5 rules

E

EscenaBuenosDias

b252490dc7

IDLE >

L

Levantarse

66c9232c66

Encender la radio y subir las persianas

IDLE >

P

Prueba openhab-conf > rules > pruebas.rules > ...

prueb

```
1 rule "Prueba"
```

```
2 when
```

```
3   Item SensorTemperaturaSalon changed
```

```
4 then
```

```
5   logInfo("Sensor temperatura","Empieza la regla apagar")
```

```
6
```

```
7
```

```
8   logInfo("Sensor temperatura", "Valor de SensorTemperaturaSalon: {}",SensorTemperaturaSalon)
```

```
9   logInfo("Sensor temperatura", "Valor de SensorTemperaturaSalon .state: {}",SensorTemperaturaSalon.state)
```

```
10
```

```
11
```

```
12   val temperatura=SensorTemperaturaSalon.state
```

```
13
```

```
14   // Apagar si la temperatura es mayor de 21 y el actuador de enchufe está encendido
```

```
15   if (temperatura>21|°C && MultiActuadorHTTP_Enchufe.state==ON){
```

```
16     logInfo("Sensor temperatura", "Apagar")
```

```
17     sendCommand(MultiActuadorHTTP_Enchufe, "OFF")
```

```
18   } else
```

```
19     logInfo("Sensor temperatura","Apagar (sin cambios)")
```

```
20
```

```
21
```

```
22   logInfo("Sensor temperatura","Termina la regla apagar")
```

```
23
```

```
end
```

T

Term

6157c

Apaga

Term

cc0ca

Encier

Sin páginas

Administración

Configuración >

Things

Model

Items

Pages

Rules >

Scripts

Schedule

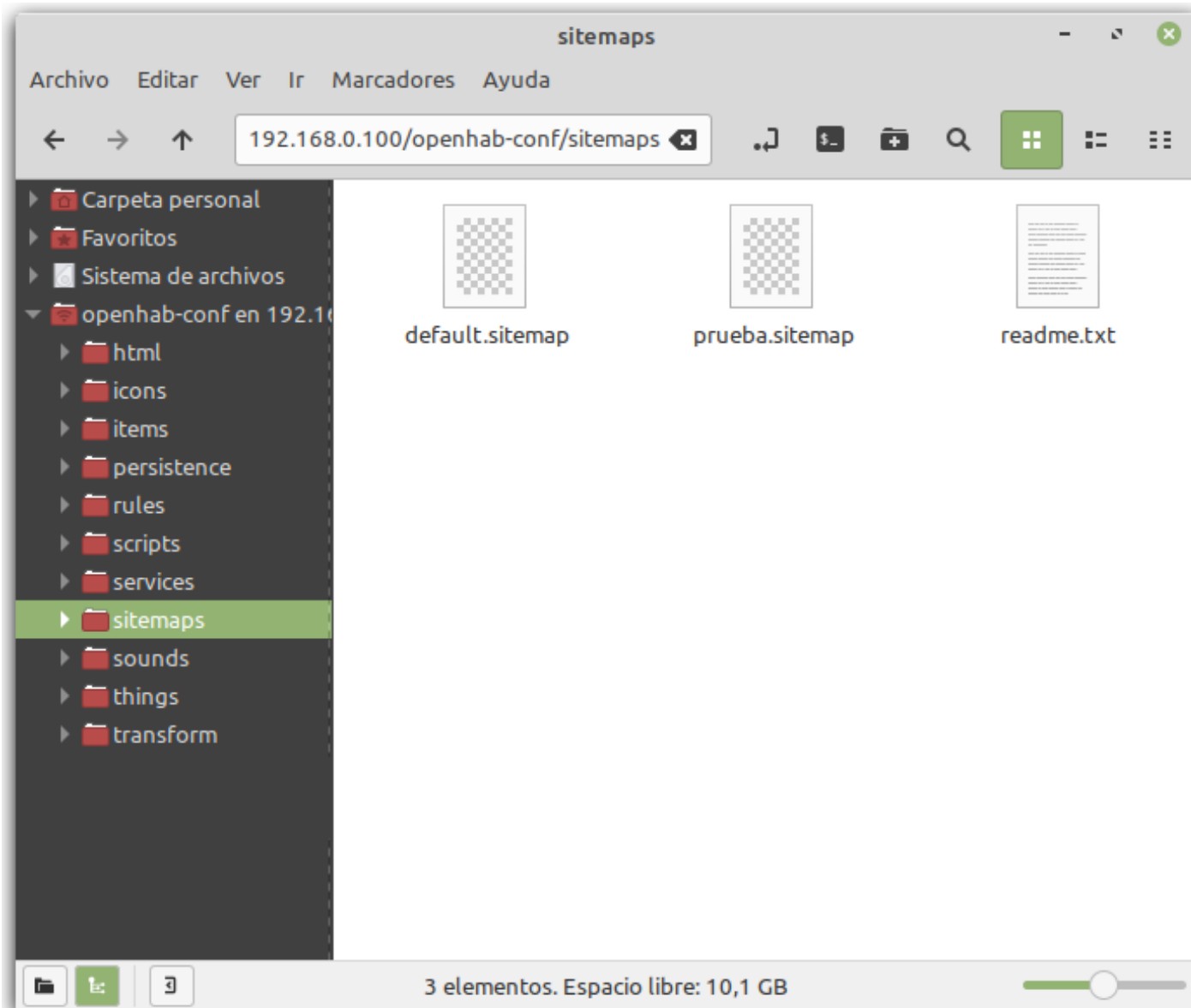
Herramientas de Desarrollo >

Ayuda y Acerca de >

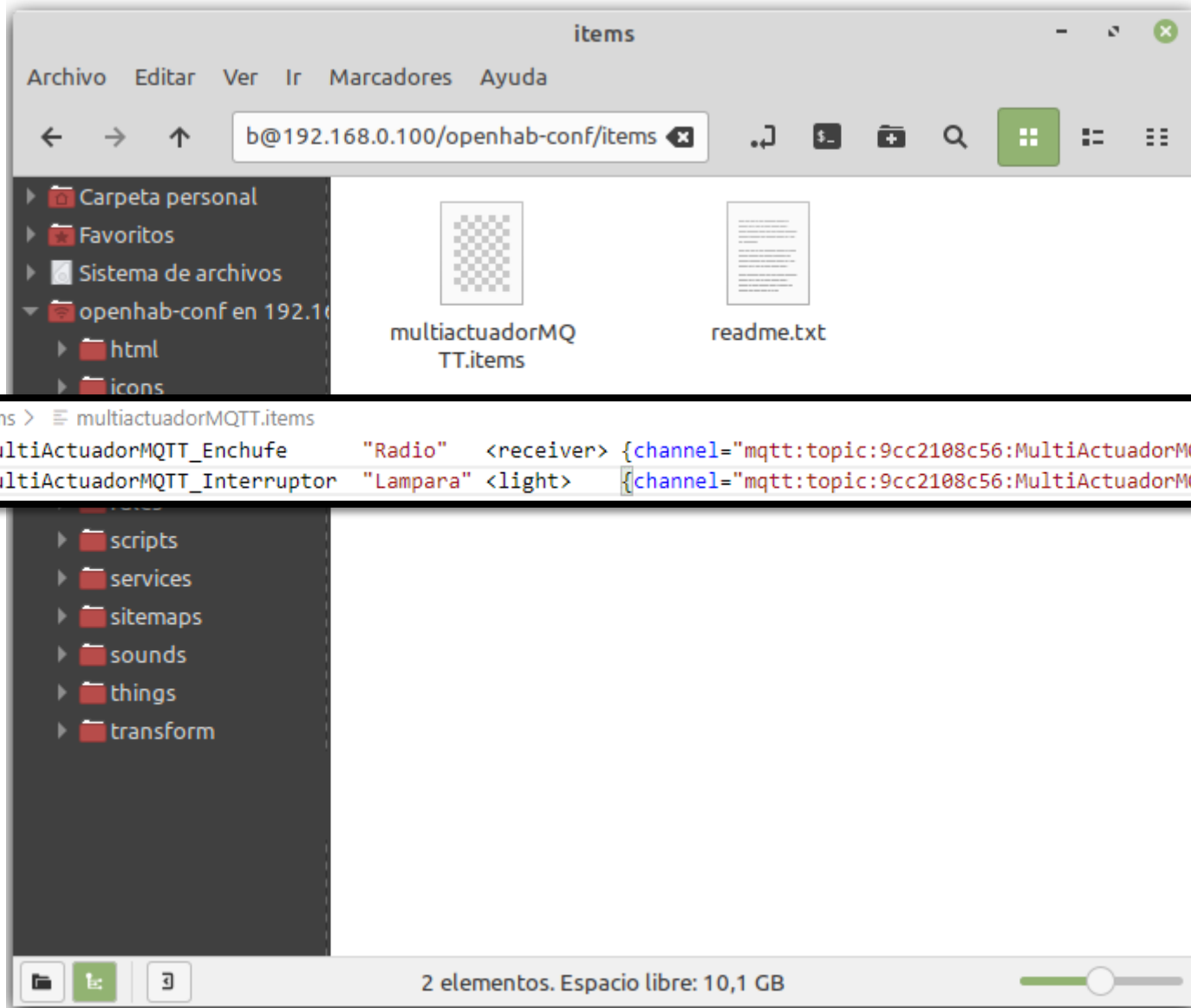
admin-openhab

192.168.0.100:8080/settings/rules/

# Configuración basada en archivos



# Configuración basada en archivos



items

Archivo Editar Ver Ir Marcadores Ayuda

b@192.168.0.100/openhab-conf/items

- Carpeta personal
- Favoritos
- Sistema de archivos
- openhab-conf en 192.168.0.100
  - html
  - icons

multiactuadorMQTT.items

readme.txt

```
openhab-conf > items > multiactuadorMQTT.items
1 Switch MultiActuadorMQTT_Enchufe "Radio" <receiver> {channel="mqtt:topic:9cc2108c56:MultiActuadorMQTT:Enchufe"}
2 Switch MultiActuadorMQTT_Interruptor "Lampara" <light> {channel="mqtt:topic:9cc2108c56:MultiActuadorMQTT:Interruptor"}
```

scripts

services

sitemaps

sounds

things

transform

2 elementos. Espacio libre: 10,1 GB

Ficheros:

- Más antigua pero más documentación

## Ficheros:

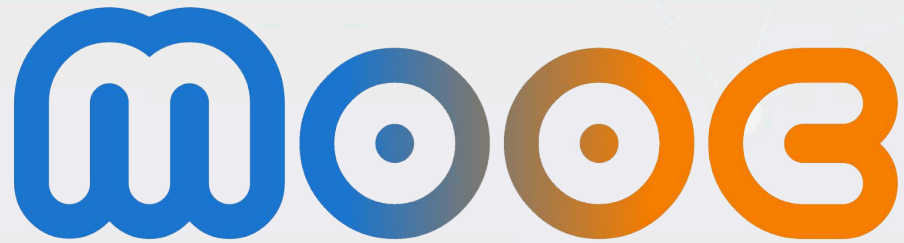
- Más antigua pero más documentación
- Permite cambios masivos, buscar y reemplazar, copiar y pegar, ....
- Mas sencillo hacer copia de seguridad o versiones

## Ficheros:

- Más antigua pero más documentación
- Permite cambios masivos, buscar y reemplazar, copiar y pegar, ....
- Mas sencillo hacer copia de seguridad o versiones

## Interfaz web:

- Menos propenso a errores
- Se puede administrar openHAB desde un teléfono
- Curva de aprendizaje con menos pendiente



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