

# The Digital Home

**A Home Automation Solution Proposal.**

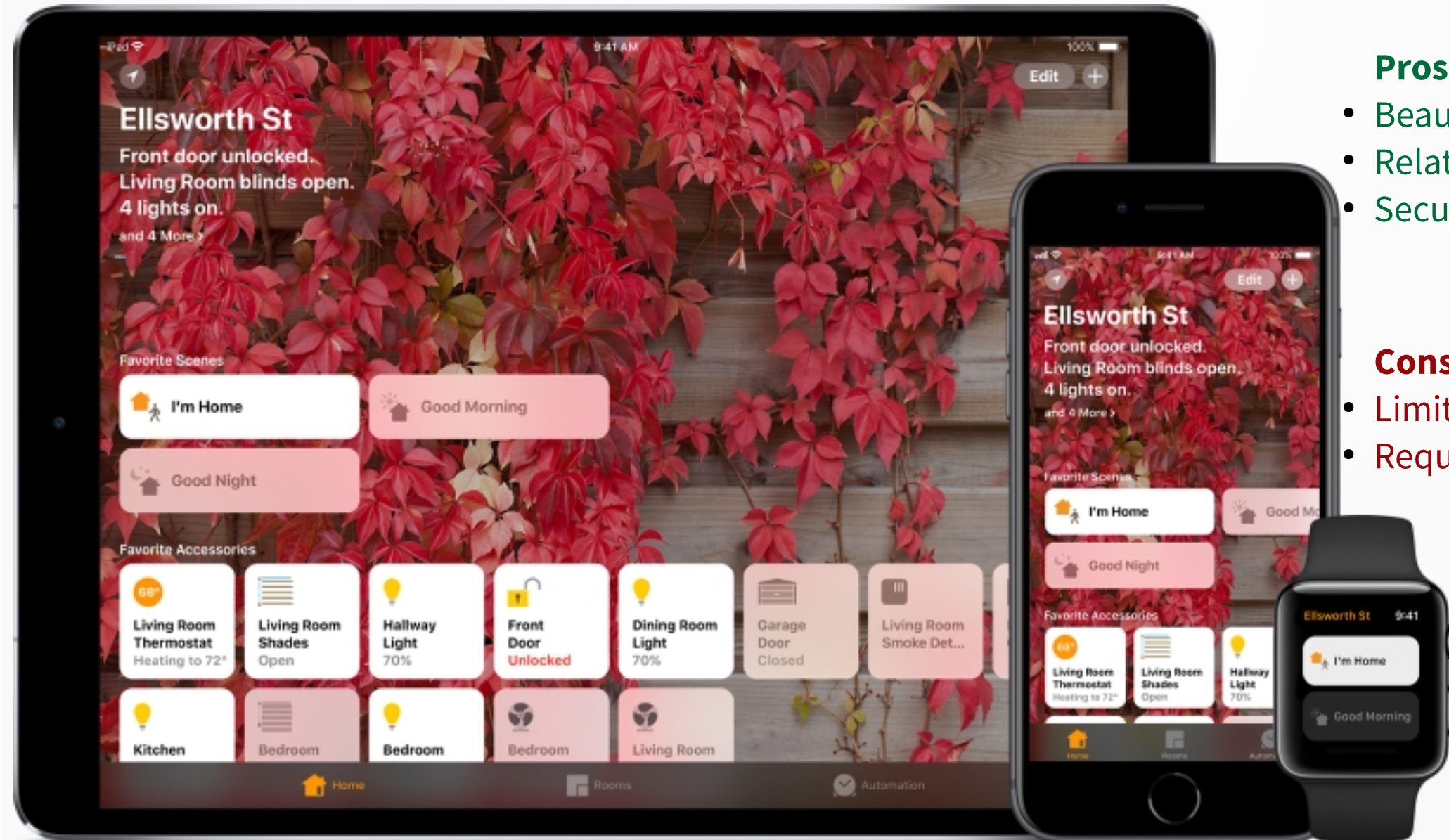
# The Home app (Apple HomeKit)

## Pros

- Beautiful Design
- Relatively reliable
- Secure

## Cons

- Limited device selection
- Requires iOS devices





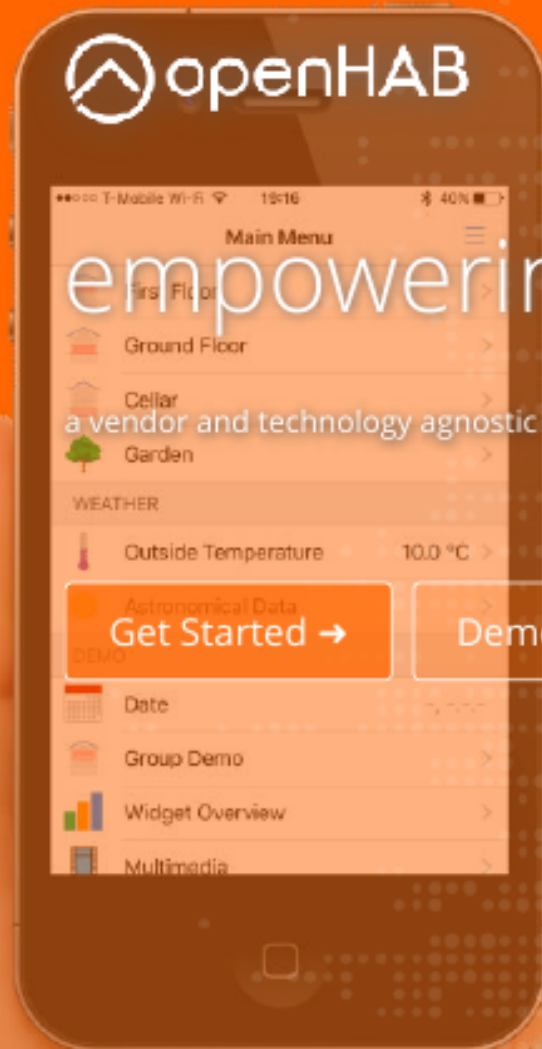
# ActionTiles (Samsung SmartThings)



<b>Terry Home Mode</b>  <b>Home</b>  San Francisco, CA Mostly Cloudy, feels like 64°  64°  7:34 am 6:11 pm 59% 3mph 60%  Garden Hill LEDs off		<b>Smart Home Monitor</b>  terry home - disarmed  Deuce Lamp off	
<b>Back Under</b> on, 40%		<b>Stairs</b> on, 80%	
<b>Helios Bench</b> 0W		<b>Helios Bench</b> 25.08kWh	
<b>Helios Bench</b> off		<b>Lock Back Door</b> locked 63%	
<b>Lock Front Door</b> locked 71%		<b>Office Standing Lamp</b> off, 40%	
<b>Den Doorway Motion</b> 66° 89%		<b>Theatre Motion SmartSense</b> active 100%	
<b>Den Doorway Motion</b> inactive 89%		<b>Laundry Room Motion</b> inactive 89%	

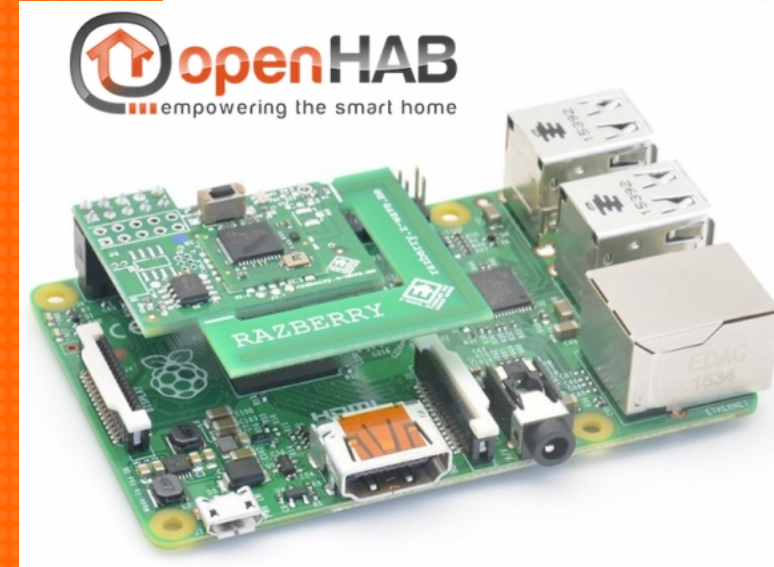
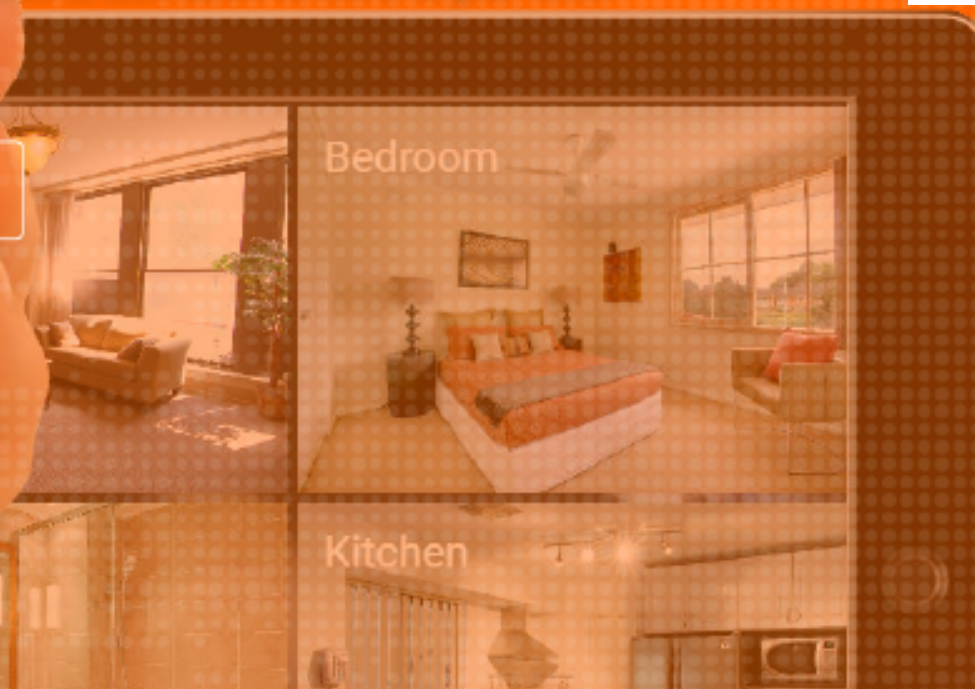


# OpenHAB (Open source)



empowering the smart home

a vendor and technology agnostic open source automation software for your home



## Pros

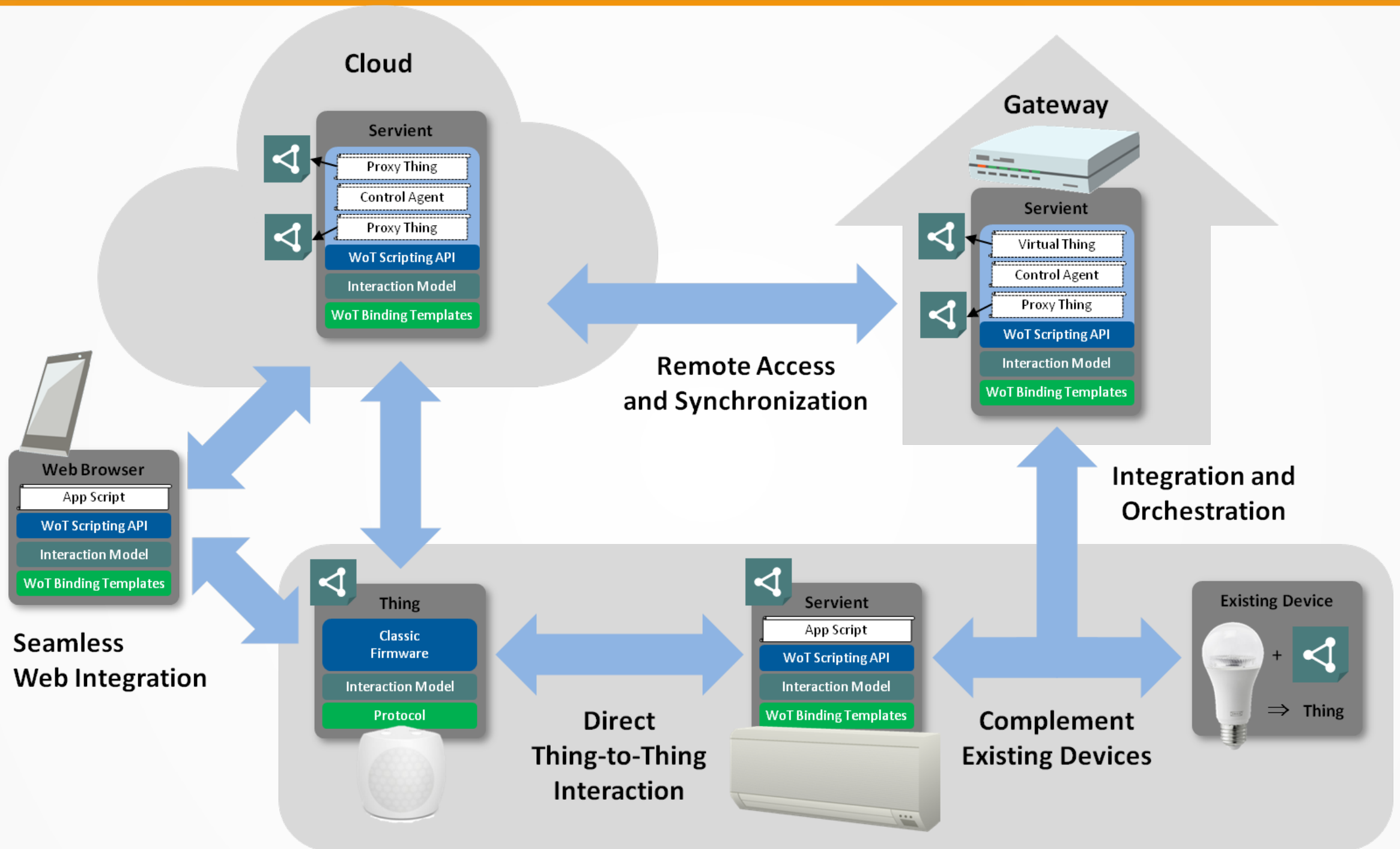
- Supports most devices.
- Runs on many APIs.

## Cons

- Requires some hacking skills

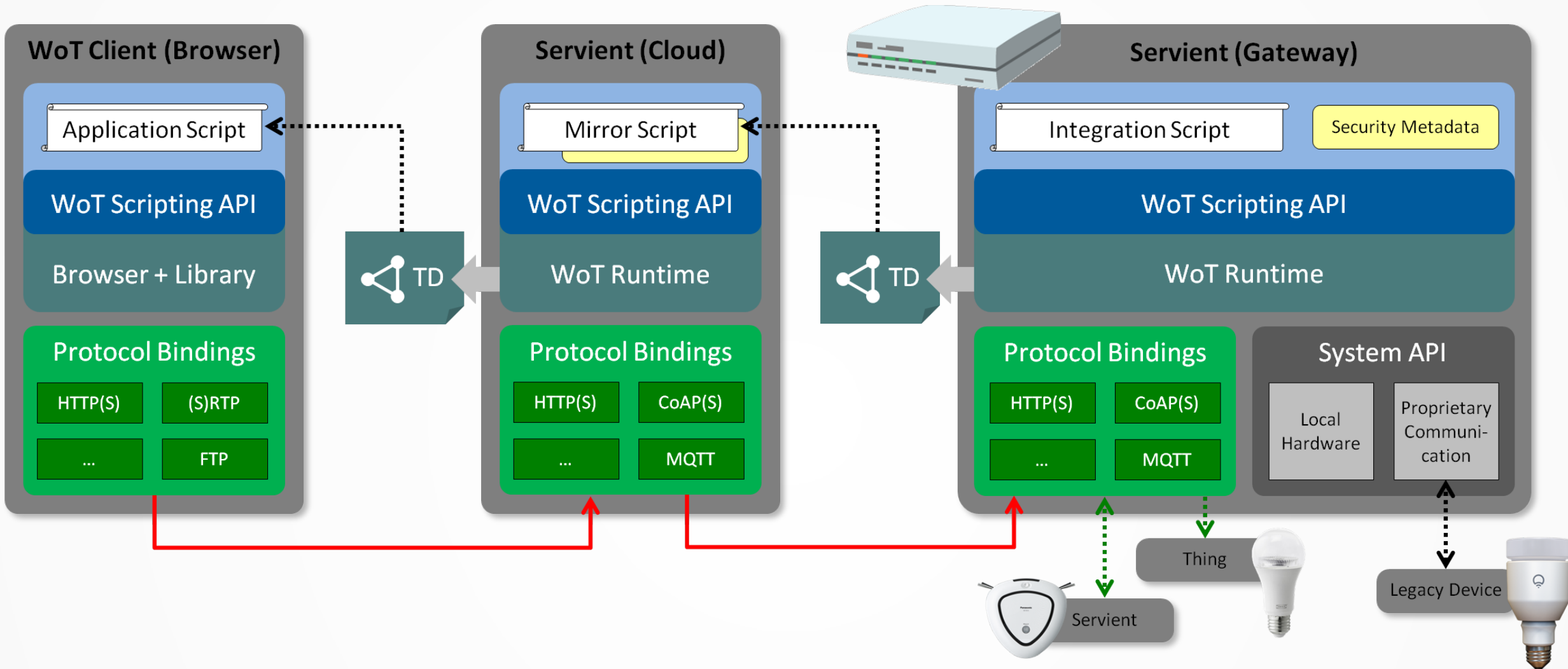
# Web of Things (WoT) Architecture

The W3C Web of Things (WoT) is intended to enable interoperability across IoT Platforms and application domains.



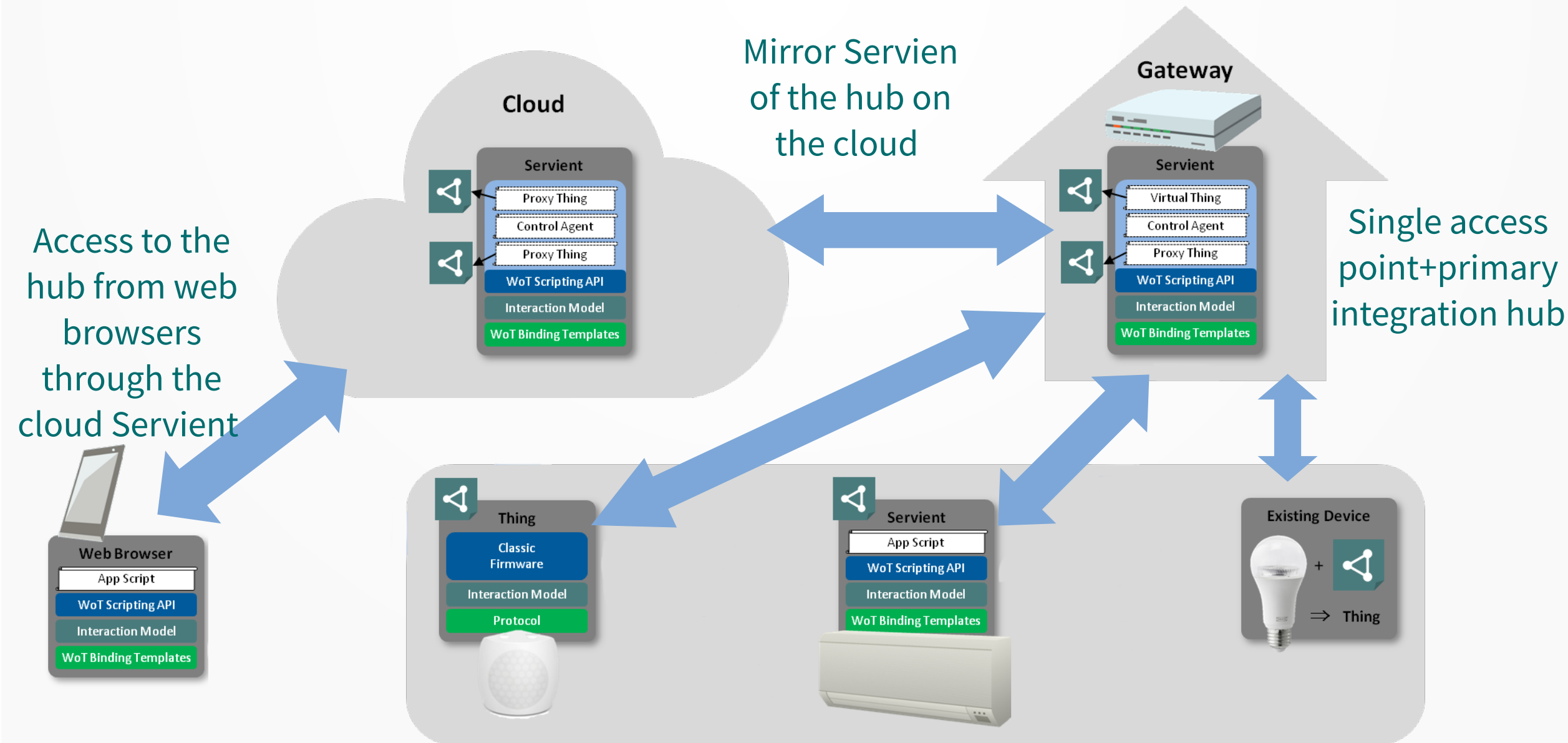
Abstract Architecture of W3C WoT

## Servient on Cloud Server and Gateway

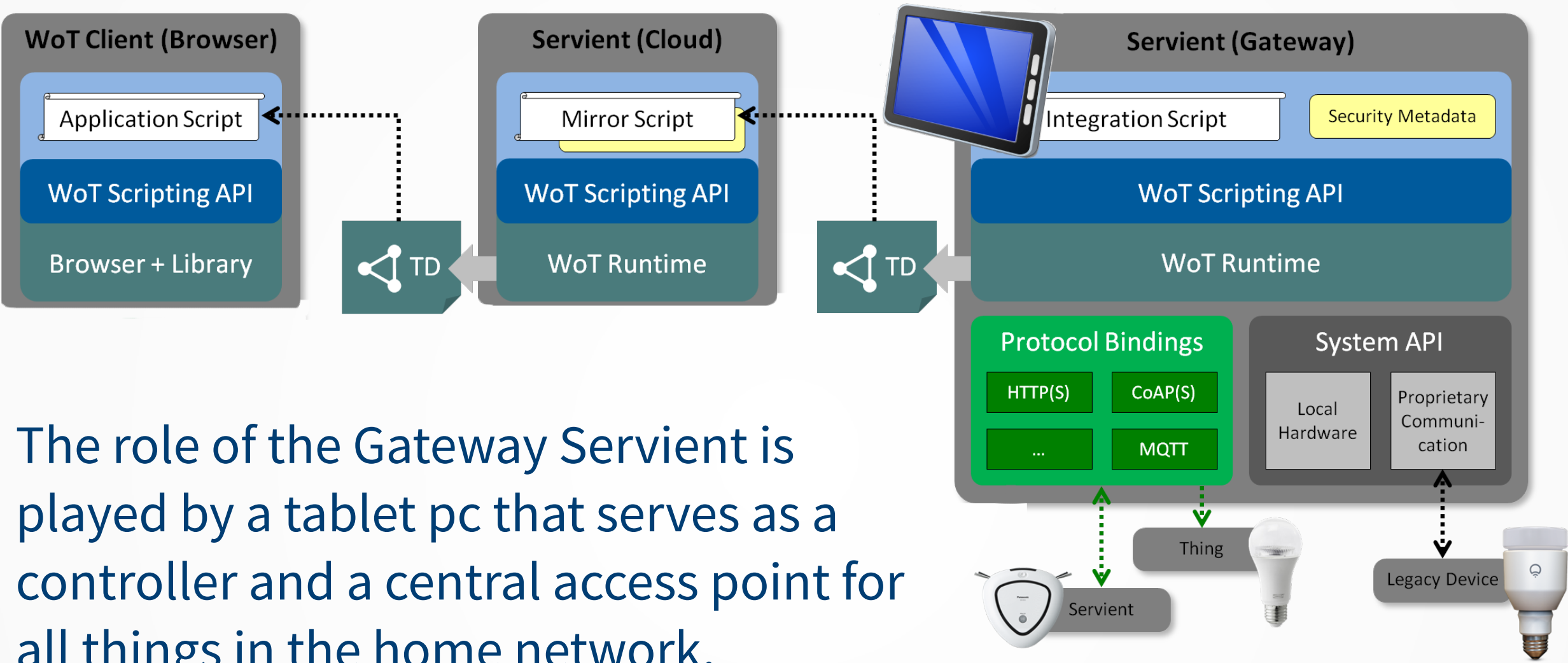


The Thing Description of the Servient on the cloud server can be just a mirror of that on the gateway, since it will generally just pass interactions directly through.

# Proposed (WoT) Architecture







The role of the Gateway Servient is played by a tablet pc that serves as a controller and a central access point for all things in the home network.

# User Interface Design Principles

- Same look on multiple platforms
- Minimal design
- Static Home button
- High contrast colors
- Control features in the back pages



## Apartment, MreketalStr. 48, (Home)

Good Morning

Good Night

Welcome Back

...

Movie Night

Studying Time

...



Occupancy (3in)



Lights (7on)



Doors (1 locked)



Outlets (4on)



Wi-Fi (3online)



A.C. (off)



Heater (on)



TV (off)



Desktop (on)



Laptop (off)



Mobiles (3in)



Calendar (5.7.18)



Consumption (30w)



Windows(1open)



Find Things

...