Wiser Hub 2ⁿᵈ generation

First of all, the wiser generation 2 is fully compliant with the actual integration.

1. Data provided by Wiser Hub 2ⁿᵈ generation

Communication

Exemples of requests between HA and the wiser Hub

Requests:

```
HTTP        408 GET /data/v2/domain/ HTTP/1.1
HTTP        409 GET /data/v2/network/ HTTP/1.1
HTTP        411 GET /data/v2/schedules/ HTTP/1.1
HTTP        408 GET /data/v2/status/ HTTP/1.1
```

Responses

```
HTTP/JS…     697 HTTP/1.1 200 OK , JavaScript Object Notation (application/json)
HTTP/JS…    1058 HTTP/1.1 200 OK , JavaScript Object Notation (application/json)
HTTP/JS…    1477 HTTP/1.1 200 OK , JavaScript Object Notation (application/json)
HTTP/JS…     136 HTTP/1.1 200 OK , JavaScript Object Notation (application/json)
```

Data:

The communication between HA and the Wiser hub are built with a hierarchy:

❖ Domain   /data/domain/
  ➢ Cloud
  ➢ HeatingChannel
  ➢ Room
  ➢ Device
  ➢ Zigbee
  ➢ UpgradeInfo
  ➢ Roomstat
  ➢ Smartplug
  ➢ HeatingActuator
  ➢ Light
  ➢ Shutter
  ➢ **Automation**
  ➢ **PTE**
  ➢ **Weather**
  ➢ DeviceCapabilityMatrix
  ➢ FeatureCapability
  ➢ System
  ➢ **Equipment**

```
JavaScript Object Notation: application/json
∨ Object
  > Member: Cloud
  > Member: HeatingChannel
  > Member: Room
  > Member: Device
  > Member: Zigbee
  > Member: UpgradeInfo
  > Member: RoomStat
  > Member: SmartPlug
  > Member: HeatingActuator
  > Member: Light
  > Member: Shutter
  > Member: Automation
  > Member: PTE
  > Member: Weather
  > Member: DeviceCapabilityMatrix
  > Member: FeatureCapability
  > Member: System
  > Member: Equipment
```

- ❖ Network /data/network/

  - ➢ AccesPoint
  - ➢ Station

  ⌄ JavaScript Object Notation: application/json
    ⌄ Object
      > Member: AccessPoint
      > Member: Station

- ❖ Schedules /data/schedules/
  - ➢ Heating
  - ➢ OnOff
  - ➢ Level

  ⌄ JavaScript Object Notation: application/json
    ⌄ Object
      > Member: Heating
      > Member: OnOff
      > Member: Level

- ❖ Opentherm /data/opentherm/

- ❖ **Status** /data/status/
  - ➢ Uptime
  - ➢ lastResetReason
  - ➢ taskUsageEnabled

  ⌄ JavaScript Object Notation: application/json
    ⌄ Object
      > Member: uptime
      > Member: lastResetReason
      > Member: taskUsageEnabled

In bold, new datatype provided by wiser Hub gen 2
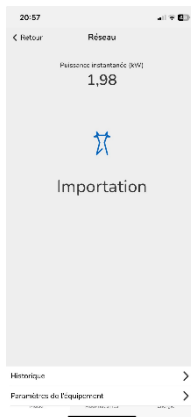
2. Power Tag E

Model one phase and model 3 phases

https://www.se.com/fr/fr/product/R9M60/wiser-energy-powertag-capteur-de-mesure-sans-fil-monophas%C3%A9/

This device that provide electrical measures to a Wiser Hub or to a Wiser gateway (modbus TCP for example).

It can be used for import Energy from the grid , or to measure the Energy injected in the grid or to measure the consumption of one or a group of devices.

Then the Wiser Home application has an Energy Manager that:

- ➢ Archive the electrical data for a Power tag, or the consumption of the Smartplugs and heating-actuators.
- ➢ Provide reports to the user.
- ➢ Calculate the cost of the energy…
  Wiser home screenshots

Device PTE from the Hub

Extract from the diagnostic of the Hub

Data/domain/V2/Device/pte

```json
"PTE": [
  {
    "id": 7,
    "EquipmentId": 4,
    "DeviceId": 7,
    "NumberOfPhases": "One",
    "Configured": "Configured",
    "UUID": "32e2c17c-xxxxxxx",
    "InstallationType": "Bidirectional",
    "Direction": "Forward",
    "GridLimit": 36,
    "GridLimitUom": "kVA",
    "OperatingStatus": "NormalOperation",
    "FaultStatus": "NoFault",
    "EnergyExport": "Unable",
    "RawTotalActivePower": 1922
  }
```

3. Energy management

Data are provided by the hub by the level Domain/Equipment/
for PTE of course and smartplug and HeatingActuators

Equipment PTE

```
"id": 4,
"DeviceApplicationInstanceType": "PTE",
"DeviceApplicationInstanceId": 7,
"UUID": "f98b03a8-ad80-4274-8400-d872237fb940",
"Controllable": false,
"CloudManaged": false,
"NumberOfPhases": "One",
"Configured": "Configured",
"SelfConsumption": false,
"InstallationType": "Bidirectional",
"EnergyExport": "Unable",
"EquipmentFamily": "GRID",
"Direction": "Forward",
"GridLimit": 36,
"GridLimitUom": "kVA",
"IconId": 1,
"UnderPowerNotification": {
  "PeriodMins": 5,
  "Limit": 0,
  "Enabled": true
},
"OperatingStatus": "NormalOperation",
"FaultStatus": "NoFault",
"CurrentSummationDelivered": 57813,
"CurrentSummationReceived": 16455,
"TotalActivePower": 1922,
"ActivePower": 1922,
"RMSCurrent": 8,
"RMSVoltage": 235,
"PcmMode": false
```

HeatingActuators

```
"id": 2,
"DeviceApplicationInstanceType": "HeatingActuator",
"DeviceApplicationInstanceId": 3,
"UUID": "d301f13f-a5bf-439f-9597-99316c052000",
"Controllable": true,
"CloudManaged": false,
"NumberOfPhases": "One",
"Configured": "Configured",
```

```
        "InstallationType": "Mono",
        "EquipmentName": "16A-Room1",
        "EquipmentFamily": "Heating",
        "Direction": "Forward",
        "OperatingStatus": "NormalOperation",
        "FaultStatus": "NoFault",
        "CurrentSummationDelivered": 1208,
        "TotalActivePower": 0,
        "ActivePower": 0
```

SmartPlug

```
        "id": 3,
        "DeviceApplicationInstanceType": "SmartPlug",
        "DeviceApplicationInstanceId": 6,
        "UUID": "3f2c499e-a7f9-4921-8ec5-3bb0fab05b17",
        "Controllable": true,
        "CloudManaged": false,
        "NumberOfPhases": "One",
        "Configured": "Configured",
        "InstallationType": "Mono",
        "EquipmentName": "Lampadaire ",
        "EquipmentFamily": "ElectricalPlug",
        "Direction": "Forward",
        "FunctionalControlMode": "PowerContactor",
        "IconId": 5,
        "OperatingStatus": "NormalOperation",
        "FaultStatus": "NoFault",
        "CurrentSummationDelivered": 0,
        "TotalActivePower": 0,
        "ActivePower": 0,
        "PcmMode": false
```
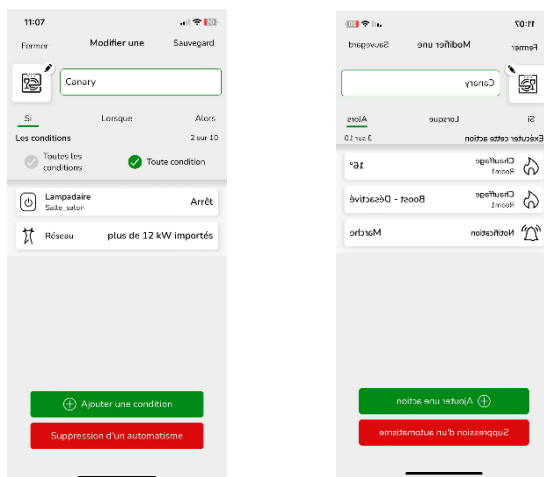
4. Questions for the wiser integration

❖ The hub as an organization of its data for each type of room, sensor or actuator, does it make sense to also create objects like the hub?
By doing so, I think it should be easier to maintain the device (Wiser) or to add new device.

❖ The aioWiserHeatAPI has already such a structure.

❖ There are some differences between the hub V1 and the hub V2, how do you imagine the integration, one for the V1 and one for the V2 or one for both? (I have already made an adaptation for the shutters)

❖ For smartplugs and Heating actuators some information are duplicated for Energy management in the equipment, what do you think about duplicate this?

5. Automation

With the Wiser Hub gen2 and Wiser Home app you can create automation (10 max)

Screen shots:

Data provided:

```
"id": 2,
"Name": "Canary ",
"IconId": 0,
"Enabled": false,
"EnableNotification": true
```

The command from the Wiser Home App

Create

Request:

POST /Automation?Name=Canary+&Enabled=true&IconId=0&EnableNotification=true HTTP/1.1
Secret: MnvhonRDhlQbTW…..
Wiser-app-version: 6.5.0
Content-Type: application/json; charset=utf-8
Content-Length: 174
Host: 10..x.x.x

{"triggerMode":"Any","triggers":[{"domain":"SmartPlug","id":6,"get":"TargetState","comparator":"Equals","compareTo":{"stringValue":"Off"}}],"timeConstraints":[],"actions":[]}

Response:

HTTP/1.1 201 Created
Content-Length: 79
Content-Type: application/json
Keep-Alive: timeout=5, max=5

{"id":2,"Name":"Canary ","IconId":0,"Enabled":true,"EnableNotification":true}

Modify

request

PATCH /Automation/2?Name=Canary+&Enabled=true&IconId=0&EnableNotification=true HTTP/1.1
Secret: MnvhonRDhlQbTW…..
Wiser-app-version: 6.5.0
Content-Type: application/json; charset=utf-8
Content-Length: 174
Host: 10..x.x.x

{"triggerMode":"Any","triggers":[{"domain":"SmartPlug","id":6,"get":"TargetState","comparator":"Equals","compareTo":{"stringValue":"Off"}}],"timeConstraints":[],"actions":[]}

response

HTTP/1.1 200 OK
Content-Length: 0
Content-Type: application/json
Keep-Alive: timeout=5, max=5

Enable

Enable request

PATCH /data/v2/domain/Automation/2/Enabled HTTP/1.1
Secret: MnvhonRDhlQbTW…..
Wiser-app-version: 6.5.0
Content-Type: application/json; charset=utf-8
Content-Length: 4
Host: 10..x.x.x

true

Enable response:

HTTP/1.1 200 OK
Content-Length: 4
Content-Type: application/json
Keep-Alive: timeout=5, max=5

Feature automation in the integration:

For Automations, I think that if we can display the "code" it should be nice but only commands to enable or disable , if it's possible.