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
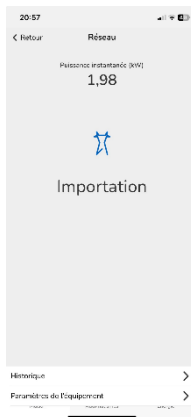
2. Power Tag E

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

```
"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
```
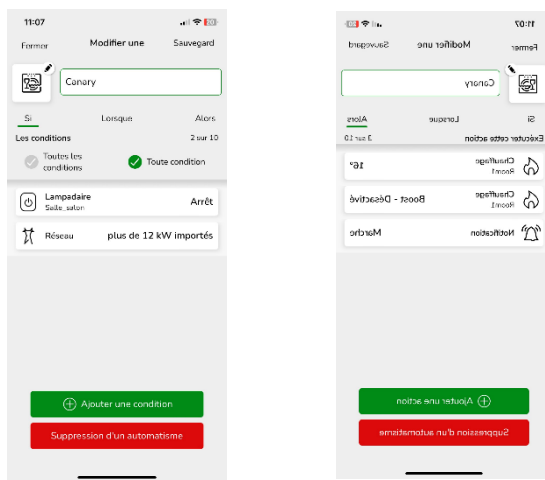
4. Questions for the wiser integration

❖ 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
Create an automation and enable it.

POST /Automation?Name=Canary+&Enabled=true&IconId=0&EnableNotification=true HTTP/1.1

Create	
Request	Response
POST /Automation?Name=Canary+&Enabled=true&IconId=0&EnableNotification=true HTTP/1.1	HTTP/1.1 201 Created Content-Length: 79 Content-Type: application/json

Secret: MnvhonRDhlQbTW…..	Keep-Alive: timeout=5, max=5
Wiser-app-version: 6.5.0	
Content-Type: application/json; charset=utf-8	{"id":2,"Name":"Canary
Content-Length: 174	","IconId":0,"Enabled":true,"EnableNotification"
Host: 10..x.x.x	:true}
{"triggerMode":"Any","triggers":[{"domain":"SmartPl ug","id":6,"get":"TargetState","comparator":"Equals", "compareTo":{"stringValue":"Off"}}],"timeConstraints ":[],"actions":[]}	

Get the automation

GET /Automation/automation_id HTTP/1.1
GET /Automation/2 HTTP/1.1

Get

Request	Response
GET /Automation/2 HTTP/1.1	HTTP/1.1 200 OK
Secret:	Content-Length: 492
MnvhonRDhlQbTWgIZ9JSyXufeCdIlNIOb64t0h4rqg9f+	Content-Type: text/plain
rHxMtalcg6YTVsODqd0SnGBCFCSeSZycKpePgRFnQ0jH	Keep-Alive: timeout=5, max=5
lx1nN0wLuImrnAalyAUCTsjZVLGGBiTAvlEbWhe	
Wiser-app-version: 6.5.0	{"TriggerMode":"Any","Triggers":[{"Domain":"S
Host: 10.0.0.13	martPlug","Id":6,"Get":"TargetState","Compara
	tor":"Equals","CompareTo":{"StringValue":"Off"
	}},{"Domain":"Equipment","Id":4,"Get":"TotalAc
	tivePower","Comparator":"GreaterThan","Com
	pareTo":{"IntValue":12000}}],"Actions":[{"Doma
	in":"Room","Id":1,"Action":"RequestOverride","
	Value":"{\"type\":\"Manual\",\"setPoint\":160}
	"},{"Domain":"Room","Id":1,"Action":"Request
	Override","Value":"{\"type\":\"Boost\",\"durati
	onMinutes\":0}"}],"TimeConstraints":[]}

Modify

PATCH /Automation/2?Name=Canary+&Enabled=true&IconId=0&EnableNotification=true HTTP/1.1

Modify

Request	Response
PATCH	HTTP/1.1 200 OK
/Automation/2?Name=Canary+&Enabled=true&IconI	Content-Length: 0
d=0&EnableNotification=true HTTP/1.1	Content-Type: application/json
Secret: MnvhonRDhlQbTW…..	Keep-Alive: timeout=5, max=5
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":[]}	

Delete

DELETE /data/v2/domain/Automation/automation_id HTTP/1.1

DELETE /data/v2/domain/Automation/2 HTTP/1.1

Delete	
Request	Response
DELETE /data/v2/domain/Automation/2 HTTP/1.1 Secret: MnvhonRDhlQbTW Wiser-app-version: 6.5.0 Content-Length: 0 Host: 10.x.x.x	HTTP/1.1 204 No Content Content-Length: 0 Content-Type: application/json Keep-Alive: timeout=5, max=5

Enable

PATCH /data/v2/domain/Automation/automation_id/Enabled HTTP/1.1

PATCH /data/v2/domain/Automation/2/Enabled HTTP/1.1

Enable	
Request	Response
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	HTTP/1.1 200 OK Content-Length: 4 Content-Type: application/json Keep-Alive: timeout=5, max=5 true
disable	
Request	Response
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: 5 Host: 10..x.x.x false	HTTP/1.1 200 OK Content-Length: 5 Content-Type: application/json Keep-Alive: timeout=5, max=5 false

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.

6. Summer comfort

A summer comfort mode had been introduced in the Wiser Home app, based on the wiserhub 2nd generation.

Features

You can set:

- Activate or desactivate
- The outdoor discomfort temperature
- The indoor discomfort temperature
- The shutters and their position and tilt ("summer")
- The rooms that participate to the feature

Commands from Wiser Home assistant

Enable / disable

PATCH /data/v2/domain/System/**SummerComfortEnabled** HTTP/1.1

Enable	
Request	Request
PATCH /data/v2/domain/System/SummerComfortEnabled 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	PATCH /data/v2/domain/System/SummerComfortEnabled 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
Disable	
Request	Request
PATCH /data/v2/domain/System/SummerComfortEnabled HTTP/1.1 Secret: MnvhonRDhlQbTW Wiser-app-version: 6.5.0 Content-Type: application/json; charset=utf-8 Content-Length: 5 Host: 10.x.x.x false	PATCH /data/v2/domain/System/SummerComfortEnabled HTTP/1.1 Secret: MnvhonRDhlQbTW Wiser-app-version: 6.5.0 Content-Type: application/json; charset=utf-8 Content-Length: 5 Host: 10.x.x.x false

Temperatures
PATCH /data/v2/domain/System/IndoorDiscomfortTemperature HTTP/1.1

Indoor temperature	
Request	Response
PATCH /data/v2/domain/System/IndoorDiscomfortTemperature HTTP/1.1 Secret: MnvhonRDhlQbTW Wiser-app-version: 6.5.0 Content-Type: application/json; charset=utf-8 Content-Length: 3 Host: 10.x.x.x 250	HTTP/1.1 200 OK Content-Length: 3 Content-Type: application/json Keep-Alive: timeout=5, max=5 250
Outdoor	
Request	Response
PATCH /data/v2/domain/System/OutdoorDiscomfortTemperature HTTP/1.1 Secret: MnvhonRDhlQbTW Wiser-app-version: 6.5.0 Content-Type: application/json; charset=utf-8 Content-Length: 3 Host: 10.x.x.x 270	HTTP/1.1 200 OK Content-Length: 1 Content-Type: application/json Keep-Alive: timeout=5, max=5 270

Shutter :

Shutter respect the summer comfort
PATCH /data/v2/domain/Shutter/shutter_id/RespectSummerComfort HTTP/1.1

Enable	
Request	Request
PATCH /data/v2/domain/Shutter/1/RespectSummerComfort 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	HTTP/1.1 200 OK Content-Length: 4 Content-Type: application/json Keep-Alive: timeout=5, max=5 true
Disable	
Request	Request
PATCH /data/v2/domain/Shutter/1/RespectSummerComfort HTTP/1.1 Secret: MnvhonRDhlQbTW Wiser-app-version: 6.5.0 Content-Type: application/json; charset=utf-8 Content-Length: 5 Host: 10.x.x.x	HTTP/1.1 200 OK Content-Length: 5 Content-Type: application/json Keep-Alive: timeout=5, max=5 false

false	

Shutter summer comfort positions

1/ PATCH /data/v2/domain/Shutter/shutter_id/ SummerComfortTilt HTTP/1.1

2/ PATCH /data/v2/domain/Shutter/shutter_id/ SummerComfortLift HTTP/1.1

Tilt position SummerComfortTilt	
Request	Request
PATCH /data/v2/domain/Shutter/1/SummerComfortTilt HTTP/1.1 Secret: MnvhonRDhlQbTW Wiser-app-version: 6.5.0 Content-Type: application/json; charset=utf-8 Content-Length: 1 Host: 10.x.x.x 0	HTTP/1.1 200 OK Content-Length: 1 Content-Type: application/json Keep-Alive: timeout=5, max=5 0
Lift position SummerComfortLift	
Request	Request
PATCH /data/v2/domain/Shutter/1/SummerComfortLift HTTP/1.1 Secret: MnvhonRDhlQbTW Wiser-app-version: 6.5.0 Content-Type: application/json; charset=utf-8 Content-Length: 2 Host: 10.x.x.x 36	HTTP/1.1 200 OK Content-Length: 2 Content-Type: application/json Keep-Alive: timeout=5, max=5 36

Room :

Roomr respect the summer comfort

PATCH /data/v2/domain/Room/room_id/IncludeInSummerComfort HTTP/1.1

Enable	
Request	Request
PATCH /data/v2/domain/Room/1/IncludeInSummerComfort	HTTP/1.1 200 OK Content-Length: 4

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	Content-Type: application/json Keep-Alive: timeout=5, max=5 true
Disable	
Request	Request
PATCH /data/v2/domain/Room/3/IncludeInSummerComfort HTTP/1.1 Secret: MnvhonRDhlQbTW Wiser-app-version: 6.5.0 Content-Type: application/json; charset=utf-8 Content-Length: 5 Host: 10.x.x.x false	HTTP/1.1 200 OK Content-Length: 5 Content-Type: application/json Keep-Alive: timeout=5, max=5 false