

API

The API is the entry point for any application needing to communicate with the server to get information about the home automation box.

1. Protocol

The exchanges are made over a TCP connection in JSON format.

The communication can be initiated by the application or the server and must follow the same canvas.

- *Request message format*

Each message must be enclosed in a "request" tag and must include a type. It can additionally contain other data contained in the data tag.

Tag	Parent	Description	Type/Value	Cardinality
"request"	None	Root element	N/a	1
"type"	"request"	Request type	String	1
"data"	"request"	Request data	N/a	0-1

- *Response message format*

Response messages follow the same structure. Their type should be the same as the message they are responding to.

Tag	Parent	Description	Type/Value	Cardinality
"response"	None	Root element	N/a	1
"type"	"response"	Response type	String	1
"data"	"response"	Response data	N/a	1

2. Get profils Jour

- *Request*

Tag	Parent	Description	Type/Value	Cardinality
"request"	None	Root element	N/a	1
"type"	"request"	Message type	<i>GET_PROFIL_JOUR</i>	1

Example :

```
{
  "request":{
    "type": "GET_PROFIL_JOUR"
  }
}
```

- *Response*

Tag	Parent	Description	Type/Value	Cardinality
"response"	None	Root element	N/a	1
"type"	"response"	Response type	<i>GET_PROFIL_JOUR</i>	1
"data"	"response"	Response data	N/a	1
"jours"	"data"	Liste de profils	Liste de profils	0-N
"nomProfil"	"jours"	Nom du profil	String	1
"creneaux"	"jours"	Créneaux de consommation	Créneaux Array	0-N
"autorisation"	"creneaux"	Autorisation de prise en main par le système sur la durée du créneau	Boolean	1
"debut"	"creneaux"	Début du créneau	N/a	1
"heure"	"debut"	Heure de début	Integer, 0-24	1
"minute"	"debut"	Minute de début	Integer, 0-59	1
"fin"	"creneaux"	Fin du créneau	N/a	1
"heure"	"fin"	Heure de fin	Integer, 0-24	1
"minute"	"fin"	Minute de fin	Integer, 0-59	1

Example :

```

{
  "response":{
    "type": "GET_PROFIL_JOUR",
    "data":{
      "jours":[
        {
          "nomProfil": "vacances",
          "creneaux":[
            {
              "autorisation" : true,
              "debut":{
                "heure": 18,
                "minute": 30
              },
              "fin":{
                "heure": 22,
                "minute": 30
              }
            },
            {
              "autorisation" : false,
              "debut":{
                "heure": 17,
                "minute": 15
              },
              "fin":{
                "heure": 23,
                "minute": 0
              }
            }
          ]
        },
        {
          "nomProfil": "Autre profil"
        }
      ]
    }
  }
}

```

3. Set profil jour

- *Request*

Tag	Parent	Description	Type/Value	Cardinality
"request"	None	Root element	N/a	1
"type"	"request"	Message type	<i>SET_PROFIL_JOUR</i>	1
"data"	"response"	Response data	N/a	1
"nomProfil"	"data"	Nom du profil	String	1
"creneaux"	"data"	Créneaux de consommation	Créneaux Array	0-N
"autorisation"	"creneaux"	Autorisation de prise en main par le système sur la durée du créneau	Boolean	1
"debut"	"creneaux"	Début du créneau	N/a	1
"heure"	"debut"	Heure de début	Integer, 0-24	1
"minute"	"debut"	Minute de début	Integer, 0-59	1
"fin"	"creneaux"	Fin du créneau	N/a	1
"heure"	"fin"	Heure de fin	Integer, 0-24	1
"minute"	"fin"	Minute de fin	Integer, 0-59	1

Exemple :

```
{
  "request":{
    "type": "SET_PROFIL_JOUR",
    "data":{
      "nomProfil": "vacances",
      "creneaux":[
        {
          "autorisation" : true,
          "debut":{
            "heure": 18,
            "minute": 30
          },
          "fin":{
            "heure": 22,
            "minute": 30
          }
        },
        {
          "autorisation" : false,
          "debut":{
            "heure": 17,
            "minute": 15
          },

```

```
}  
  }  
  }  
  ]  
  }  
  }  
  "fin":{  
    "heure": 23,  
    "minute": 0  
  }
```

4. Remove profil Jour

- *Request*

Tag	Parent	Description	Type/Value	Cardinality
"request"	None	Root element	N/a	1
"type"	"request"	Message type	<i>RM_PROFIL_JOUR</i>	1
"data"	"response"	Response data	N/a	1
"nomProfil"	"data"	Nom du profil	String	1

Example :

```
{
  "request":{
    "type": "RM_PROFIL_JOUR",
    "data":{
      "nomProfil": "vacances"
    }
  }
}
```

5. Get profils Semaine

- *Request*

Tag	Parent	Description	Type/Value	Cardinality
"request"	None	Root element	N/a	1
"type"	"request"	Message type	<i>GET_PROFIL_SEMAINE</i>	1

Example :

```
{
  "request":{
    "type": "GET_PROFIL_SEMAINE"
  }
}
```

- *Response*

Tag	Parent	Description	Type/Value	Cardinality
"response"	None	Root element	N/a	1
"type"	"response"	Response type	<i>GET_PROFIL_SEMAINE</i>	1
"data"	"response"	Response data	N/a	1
"semaines"	"data"	Lise de semaines	Liste de profils semaine	0-N
"nomProfil"	"semaines"	Nom du profil	String	1
"jours"	"semaines"	Liste des profils jours	String Array	7

Example :

```
{
  "response":{
    "type": "GET_PROFIL_SEMAINE",
    "data":{
      "semaines":[
        {
          "nomProfil":"Semaine normale",
          "jours":[
            "travail",
            "travail",
            "travail",
            "travail",
            "travail",
            "week-end",
            "week-end"
          ]
        }
      ]
    }
  }
}
```



6. Set profil semaine

- *Request*

Tag	Parent	Description	Type/Value	Cardinality
"request"	None	Root element	N/a	1
"type"	"request"	Message type	<i>SET_PROFIL_SEMAINE</i>	1
"data"	"response"	Response data	N/a	1
"nomProfil"	"data"	Nom du profil	String	1
"jours"	"data"	Liste des profils jours	String Array	7

Example :

```
{
  "request":{
    "type": "SET_PROFIL_SEMAINE",
    "data":{
      "nomProfil":"Semaine normal",
      "jours":[
        "travail",
        "travail",
        "travail",
        "travail",
        "travail",
        "week-end",
        "week-end"
      ]
    }
  }
}
```

7. Remove profil Semaine

- *Request*

Tag	Parent	Description	Type/Value	Cardinality
"request"	None	Root element	N/a	1
"type"	"request"	Message type	<i>RM_PROFIL_SEMAINE</i>	1
"data"	"response"	Response data	N/a	1
"nomProfil"	"data"	Nom du profil	String	1

Example :

```
{
  "request":{
    "type": "RM_PROFIL_SEMAINE",
    "data":{
      "nomProfil": "Semaine normale"
    }
  }
}
```

8. Get pièces

- *Request*

Tag	Parent	Description	Type/Value	Cardinality
"request"	None	Root element	N/a	1
"type"	"request"	Message type	<i>GET_PIECES</i>	1

Example :

```
{
  "request":{
    "type": "GET_PIECES"
  }
}
```

- *Response*

Tag	Parent	Description	Type/Value	Cardinality
"response"	None	Root element	N/a	1
"type"	"response"	Response type	<i>GET_PIECES</i>	1
"data"	"response"	Response data	N/a	1
"pieces"	"data"	Liste pièces	Liste de pièces	0-N
"nomPiece"	"pieces"	Nom de la pièce	String	1
"objets"	"pieces"	Nom des objets	Liste de string	0-N

Example :

```
{
  "response":{
    "type": "GET_PIECES",
    "data":{
      "pieces":[
        {
          "nomPiece":"Chambre Arthur",
          "objets":[
            "radiateur 1",
            "radiateur 2",
            "prise 1"
          ]
        }
      ]
    }
  }
}
```

9. Add objet pièce

- *Request*

Tag	Parent	Description	Type/Value	Cardinality
"request"	None	Root element	N/a	1
"type"	"request"	Message type	<i>ADD_OBJET_PIECE</i>	1
"data"	"response"	Response data	N/a	1
"nomPiece"	"data"	Nom de la pièce	String	1
"objet"	"data"	Nom de l'objet	String	1

Example :

```
{
  "request":{
    "type": "ADD_OBJET_PIECE",
    "data":{
      "nomPiece": "Chambre Arthur",
      "objet": "radiateur 1"
    }
  }
}
```

10. Remove objet pièce

- *Request*

Tag	Parent	Description	Type/Value	Cardinality
"request"	None	Root element	N/a	1
"type"	"request"	Message type	<i>RM_OBJET_PIECE</i>	1
"data"	"response"	Response data	N/a	1
"nomPiece"	"data"	Nom de la pièce	String	1
"objet"	"data"	Nom de l'objet	String	1

Example :

```
{
  "request":{
    "type": "RM_OBJET_PIECE",
    "data":{
      "nomPiece": "Chambre Arthur",
      "objet": "radiateur 1"
    }
  }
}
```

11. Remove pièce

- *Request*

Tag	Parent	Description	Type/Value	Cardinality
"request"	None	Root element	N/a	1
"type"	"request"	Message type	<i>RM_PIECE</i>	1
"data"	"response"	Response data	N/a	1
"nomPiece"	"data"	Nom de la piece	String	1

Example :

```
{
  "request":{
    "type": "RM_PIECE",
    "data":{
      "nomPiece": "Chambre Arthur"
    }
  }
}
```

12. Get objets

- *Request*

Tag	Parent	Description	Type/Value	Cardinality
"request"	None	Root element	N/a	1
"type"	"request"	Message type	<i>GET_OBJETS</i>	1

Example :

```
{
  "request":{
    "type": "GET_OBJETS"
  }
}
```

- *Response*

Tag	Parent	Description	Type/Value	Cardinality
"response"	None	Root element	N/a	1
"type"	"response"	Response type	<i>GET_OBJETS</i>	1
"data"	"response"	Response data	N/a	1
"objets"	"data"	Liste objets	Liste d'objets	0-N
"nomObjet"	"objets"	Nom de la pièce	String	1
"planning"	"objets"	Planning semaine	String	1
"typeObjet"	"objets"	Nom de l'objet	CHAUFFAGE PRISE	1
"inconnu"	"objets"	Objet nouveau découvert sur le réseau	Boolean	1
"connecte"	"objets"	Etat de l'objet	Boolean	1
"instanceNum"	"objets"	Instance de l'objet zwave	Integer	1
"deviceId"	"objets"	Id de l'objet zwave	Integer	1
"Tconfort"	"objets"	Température de confort en degré celsius	Integer	0-1
"Teco"	"objets"	Température économique en degré celsius	Integer	0-1
"allume"	"objets"	Prise allumé ou non	Integer	0-1

Example :

```
{
  "response":{
    "type": "GET_OBJETS",
    "data":{
      "objets":[
        {
          "nomObjet":"Prise 1",
          "planning":"Semaine normale",
          "typeObjet": "CHAUFFAGE",
          "inconnu": false,
          "connecte": true,
          "instanceNum": 0,
          "deviceId": 5,
          "Tconfort": 21,
          "Teco": 15
        }
      ]
    }
  }
}
```


13. Set objet

- *Request*

Tag	Parent	Description	Type/Value	Cardinality
"request"	None	Root element	N/a	1
"type"	"request"	Message type	<i>SET_OBJET</i>	1
"data"	"response"	Response data	N/a	1
"nomObjet"	"data"	Nom de la pièce	String	0-1
"planning"	"data"	Planning semaine	String	0-1
"typeObjet"	"data"	Nom de l'objet	CHAUFFAGE PRISE	1
"instanceNum"	"data"	Instance de l'objet zwave	Integer	1
"deviceId"	"data"	Id de l'objet zwave	Integer	1
"Tconfort"	"data"	Température de confort en degré celsius	Integer	0-1
"Teco"	"data"	Température économique en degré celsius	Integer	0-1

Example :

```
{
  "request":{
    "type": "SET_OBJET",
    "data":{
      "nomObjet":"Prise 1",
      "planning":"Semaine normale",
      "typeObjet": "CHAUFFAGE",
      "instanceNum": 0,
      "deviceId": 5,
      "Tconfort": 21,
      "Teco": 15
    }
  }
}
```

14. Remove objet

- *Request*

Tag	Parent	Description	Type/Value	Cardinality
"request"	None	Root element	N/a	1
"type"	"request"	Message type	<i>RM_OBJET</i>	1
"data"	"response"	Response data	N/a	1
"nomObjet"	"data"	Nom de l'objet	String	1
"instanceNum"	"data"	Instance de l'objet zwave	Integer	1
"deviceId"	"data"	Id de l'objet zwave	Integer	1

Example :

```
{
  "request":{
    "type": "RM_OBJET",
    "data":{
      "nomObjet": "Prise 1"
      "instanceNum": 0,
      "deviceId": 5
    }
  }
}
```

15. New objet

- *Request*

Tag	Parent	Description	Type/Value	Cardinality
"request"	None	Root element	N/a	1
"type"	"request"	Message type	<i>NEW_OBJET</i>	1
"data"	"request"	Response data	N/a	1
"typeObjet"	"data"	Type de l'objet	<i>String:</i> <i>CHAUFFAGE</i> <i>PRISE</i>	1
"nomObjet"	"data"	Nom de l'objet par défaut	String	1
"instanceNum"	"data"	Instance de l'objet zwave	Integer	1
"deviceId"	"data"	Id de l'objet zwave	Integer	1

Example :

```
{
  "request":{
    "type": "NEW_OBJET",
    "data":{
      "typeObjet":"PRISE",
      "nomObjet":"AN158",
      "instanceNum": 0,
      "deviceId": 5
    }
  }
}
```

16. Modification objets

- *Request*

Tag	Parent	Description	Type/Value	Cardinality
"request"	None	Root element	N/a	1
"type"	"request"	Response type	<i>HASCHANGED_OBJET</i>	1
"data"	"request"	Response data	N/a	1
"nomObjet"	"data"	Nom de la pièce	String	1
"planning"	"data"	Planning semaine	String	1
"typeObjet"	"data"	Nom de l'objet	CHAUFFAGE PRISE	1
"inconnu"	"data"	Objet nouveau découvert sur le réseau	Boolean	1
"connecte"	"data"	Etat de l'objet	Boolean	1
"instanceNum"	"data"	Instance de l'objet zwave	Integer	1
"deviceId"	"data"	Id de l'objet zwave	Integer	1
"Tconfort"	"data"	Température de confort en degré celsius	Integer	0-1
"Teco"	"data"	Température économique en degré celsius	Integer	0-1
"allume"	"data"	Prise allumé ou non	Integer	0-1

Example :

```
{
  "response": {
    "type": "HASCHANGED_OBJET",
    "data": {
      {
        "nomObjet": "Prise 1",
        "planning": "Semaine normale",
        "typeObjet": "CHAUFFAGE",
        "inconnu": false,
        "connecte": true,
        "instanceNum": 0,
        "deviceId": 5,
```

```
    "Tcomfort": 21,  
    "Teco": 15  
  }  
}  
}
```

17. Consommation

- *Request*

Tag	Parent	Description	Type/Value	Cardinality
"request"	None	Root element	N/a	1
"type"	"request"	Message type	<i>GET_CONSOMMATION</i>	1
"data"	"request"	Response data	N/a	1
"nomObjet"	"data"	Nom de l'objet	String	1
"instanceNum"	"data"	Instance de l'objet zwave	Integer	1
"deviceId"	"data"	Id de l'objet zwave	Integer	1

Example :

```
{
  "request":{
    "type": "GET_CONSOMMATION",
    "data":{
      "nomObjet":"prise1",
      "instanceNum": 0,
      "deviceId": 5
    }
  }
}
```

- *Response*

Tag	Parent	Description	Type/Value	Cardinality
"response"	None	Root element	N/a	1
"type"	"response"	Response type	<i>GET_CONSOMMATION</i>	1
"data"	"response"	Response data	N/a	1
"consommation"	"data"	Conso de l'objet TODO define unité !!	Integer	1
"nomObjet"	"data"	Nom de l'objet	String	1
"instanceNum"	"data"	Instance de l'objet zwave	Integer	1
"deviceId"	"data"	Id de l'objet zwave	Integer	1

Example :

```
{
  "response":{
    "type": "GET_CONSOMMATION",
    "data":{
      "consommation": 90,
      "nomObjet":"prise1",
      "instanceNum": 0,
      "deviceId": 5
    }
  }
}
```

18. Passage mode inclusion

- *Request*

Tag	Parent	Description	Type/Value	Cardinality
"request"	None	Root element	N/a	1
"type"	"request"	Message type	<i>MODE_INCLUSION</i>	1

Example :

```
{
  "request":{
    "type": "MODE_INCLUSION"
  }
}
```


19. Power ON : Prise

- *Request*

Tag	Parent	Description	Type/Value	Cardinality
"request"	None	Root element	N/a	1
"type"	"request"	Message type	<i>POWERON_PRISE</i>	1
"data"	"request"	Response data	N/a	1
"nomObjet"	"data"	Nom de l'objet	String	1
"instanceNum"	"data"	Instance de l'objet zwave	Integer	1
"deviceId"	"data"	Id de l'objet zwave	Integer	1

Example :

```
{
  "request":{
    "type": "POWERON_PRISE",
    "data":{
      "nomObjet":"prise1",
      "instanceNum": 0,
      "deviceId": 5
    }
  }
}
```

20. Power OFF : Prise

- *Request*

Tag	Parent	Description	Type/Value	Cardinality
"request"	None	Root element	N/a	1
"type"	"request"	Message type	<i>POWEROFF_PRISE</i>	1
"data"	"request"	Response data	N/a	1
"nomObjet"	"data"	Nom de l'objet	String	1
"instanceNum"	"data"	Instance de l'objet zwave	Integer	1
"deviceId"	"data"	Id de l'objet zwave	Integer	1

Example :

```
{
  "request":{
    "type": "POWEROFF_PRISE",
    "data":{
      "nomObjet":"prise1",
      "instanceNum": 0,
      "deviceId": 5
    }
  }
}
```