

## API

The API is the entry point for any application needing to communicate with to 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

Example :

```
{
  "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 :

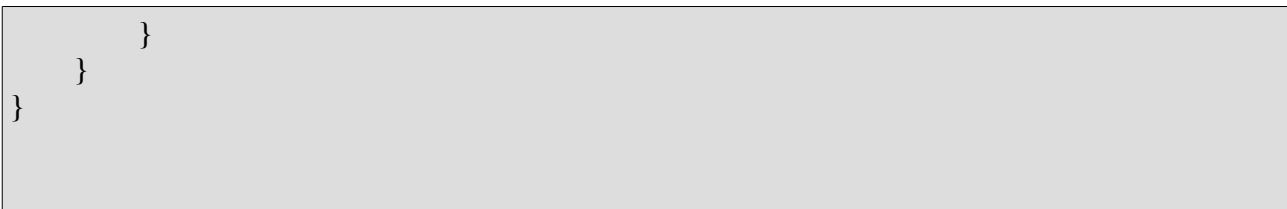
```
{
  "request":{
    "type": "GET_PROFIL_SEMAINE"
  }
}
```

- *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

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. 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 <b>TODO</b> 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
    }
  }
}
```