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	GET_PROFIL_JOUR	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	GET_PROFIL_JOUR	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

```
"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":{
"h
                                   "heure": 23,
                                   "minute": 0
                         }
                    ]
                },
                Autre profil
          ]
    }
}
```

3. Set profil jour

Request

Tag	Parent	Description	Type/Value	Cardinality
"request"	None	Root element	N/a	1
"type"	"request"	Message type	SET_PROFIL_JOUR	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

```
{
    "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
```

4. Remove profil Jour

Request

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

5. Get profils Semaine

Request

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

```
"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	SET_PROFIL_SEMAINE	1
"data"	"response"	Response data	N/a	1
"nomProfil"	"data"	Nom du profil	String	1
"jours"	"data"	Liste des profils jours	String Array	7

7. Remove profil Semaine

• Request

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

```
{
    "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	GET_PIECES	1

Example:

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

Response

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

9. Add objet pièce

Request

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

10. Remove objet pièce

Request

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

```
{
    "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	RM_PIECE	1
"data"	"response"	Response data	N/a	1
"nomPiece"	"data"	Nom de la piece	String	1

12. Get objets

• Request

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

Example:

• Response

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

```
"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	SET_OBJET	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

14. Remove objet

Request

Tag	Parent	Description	Type/Value	Cardinality
"request"	None	Root element	N/a	1
"type"	"request"	Message type	RM_OBJET	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

```
{
    "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	NEW_OBJET	1
"data"	"request"	Response data	N/a	1
"typeObjet"	"data"	Type de l'objet	String: CHAUFFAGE PRISE	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

```
{
    "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	GET_CONSOMMATION	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	GET_CONSOMMATION	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

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

17. Passage mode inclusion

Request

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

18. Power ON: Prise

Request

Tag	Parent	Description	Type/Value	Cardinality
"request"	None	Root element	N/a	1
"type"	"request"	Message type	POWERON_PRISE	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

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

19. Power OFF: Prise

Request

Tag	Parent	Description	Type/Value	Cardinality
"request"	None	Root element	N/a	1
"type"	"request"	Message type	POWEROFF_PRISE	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

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