[HB3] 3rd party Local API

Discovery

device discovery is implemented via UDP packets on port 49152

request

destination IP: 255.255.255.255
destination port: 49152
content: "RENSON_DEVICE/JSON?"

response

```
{
    "Device": string,
    "Firmwareversion": string,
    "IP": string,
    "MAC": string,
    "serial": string,
    "warranty_number": string,
    "scope": string,
    "Description": string,
    "local API version": string
}
```

example

```
{
    "Device": "HEALTHBOX3",
    "Firmwareversion": "1.0.12",
    "IP": "192.168.0.24",
    "MAC": "DE:AD:CA:FE:BE:BA",
    "serial": "123456789",
    "warranty_number": "11121314",
    "scope": "ventilation"
    "Description": "Healthbox 3.0",
    "local API version": "v1"
}
```

/v1/api/boost/{room_id}

allowed methods

GET	retrieve parameter values
PUT	update parameter values

resource definition

```
{
   "enable": boolean,        //enable boost for this room
   "level": double,          //boost level in percentage of nominal flow
rate
   "timeout": integer,       //timeout in seconds
   "remaining": integer      //remaining time in seconds
}
```

examples

activate boost function

request

```
PUT "http://{HEALTHBOX_IP}/v1/api/boost/{ROOM_ID}"
Content-Type: application/json
{
   "enable": true,
   "level": 175,
   "timeout": 900
}
```

response

```
200 OK
Content-Type: application/json
{
   "enable": true,
   "level": 175,
   "timeout": 900,
   "remaining": 263
}
```

report boost function status

request

```
GET "http://{HEALTHBOX_IP}/v1/api/boost/{ROOM_ID}"
```

response

```
200 OK
Content-Type: application/json
{
   "enable": true,
   "level": 175,
   "timeout": 900,
   "remaining": 263
}
```

/v1/api/data/current

allowed methods

GET - no subpath urls available

resource definition

```
{
   "device_type": string,                          //device type
   "description": string,      //device commercial descrition (example:
"Healthbox 3.0")
   "serial": string,                               //device serial
   "warranty_number": string                       //warranty number
   "global": {
     "parameter": {
       "<name>": {                                 //name of the parameter
         "unit": string,                           //unit of the parameter
         "value": boolean|float|string             //value of the parameter
       }
     }
   },
   "room": [
     {
       "id" : integer,                             //identifier of the room
       "name": string,                             //user name for the room
       "type": string,                             //room type
    "parameter": {
         "<name>": {                               //name of the parameter
           "unit": string,                         //unit of the parameter
           "value": boolean|float|string           //value of the parameter
         },
       "actuator": [
         {
           "name": string,                             //user name for actuator
           "type": string,                             //type of actuator
           "basic id": integer,                        //basic id of actuator
           "parameter": {
```

```
                "<name>": {                              //name of the parameter
                  "unit": string,                        //unit of the parameter
                  "value": double|string|boolean         //value of the parameter
                }
              }
            }
          ]
        }
      ],
      "sensor": [           //Only the global AQI sensor
        {
          "name": string,                          //user name for sensor
          "type": string,                          //type of sensor
          "basic id": integer,                     //basic id of sensor
       "parameter": {
            "<name>": {                            //name of the parameter
              "unit": string,                      //unit of the parameter
              "value": double|string|boolean       //value of the parameter
            }
          }
```

```
        }
    ]
}
```

example 1:

request

```
GET "http://{HEALTHBOX_IP}/v1/api/data/current"
```

response

```
{
    "global": {
        "device_type": "HEALTHBOX3",
    "description": "Healthbox 3.0)",
        "serial": "000125485",
        "warranty_number": "11121314",
        "parameter": {
            "device name": {
                "unit": "",
                "value": "mijn huis"
            },
            "street": {
                "unit": "",
                "value": "Maalbeekstraat 10"
            },
            "postal code": {
                "unit": "",
                "value": "8790"
            },
            "city": {
                "unit": "",
                "value": "Waregem"
            },
            "country":
                "unit": "",
                "value": "Belgium"
            }
        }
    }
    "room": [
        {
            "id": 1,
            "name": "Stacey's room",
            "type": "BathRoom",
            "parameter": {
                "subzone": {
                    "unit": "",
```

```
            "value":
"[{"type":"BathRoom","flowrate":50},{"type":"Toilet","flowrate":25}]"
          },
          "valve": {
            "unit": "",
            "value": "1.2"     //1.2 stands for the second valve on a
collector connected to opening 1
          },
          "nominal": {
            "unit": "m³/h",
            "value": 75
          }
        },
        "actuator": [
          {
            "name": "<Healtbox3>[192.168.0.1]<air valve>[12]",
            "type": "air valve",
            "basic id": 12,
            "parameter": {
              "flow_rate": {
                "unit": "m³/h",
                "value": "50"
              },
              "offset": {
                "unit": "pct",
                "value": "5"
              }
            }
          }
        ]
      }
    ],
    "sensor": [
      {
        "name": "<Healtbox3>[192.168.0.1]<global air quality index>[0]",
     "type": "global air quality index",
     "basic id": 0,
     "parameter": {
          "index": {
            "unit": "",
            "value": 80
          },
    "main_pollutant": {     //Only when AQI > 40 a cause must be given
            "unit": "",
            "value": "indoor CO2"
          }
    "room": {
            "unit": "",
            "value": "Stacey's room"
          }
      }
```

```
      }
    ]
  }
```

example 2:

request

```
GET "http://{HEALTHBOX_IP}/v1/api/data/current"
```

response

```
{
 "device_type": "HEALTHBOX3",
 "description": "Healthbox 3.0",
 "serial": "XJB015240332149",
    "warranty_number": "11121314",
 "global": {
  "parameter": {
   "city": {
    "unit": "",
    "value": "Waregem"
   },
    "country": {
    "unit": "",
    "value": "Belgium"
   },
    "device name": {
    "unit": "",
    "value": "Cygnus Homes Healthbox 3.0"
   },
    "postal code": {
    "unit": "",
    "value": "8790"
   },
    "street": {
    "unit": "",
    "value": "Maalbeekstraat 10"
   }
  }
 },
 "room": [{
  "id": 1,
  "name": "My bathroom",
  "type": "BathRoom",
  "parameter": {
   "valve": {
    "unit": "",
    "value": "1"
```

```json
    },
    "nominal": {
     "unit": "m³/h",
     "value": 50
    },
    "waranty_number": {
     "unit": "",
     "value": "Proto 001"
    }
   },
   "actuator": [{
    "name": "air valve[1]_HealthBox 3[Healthbox3]",
    "type": "air valve",
    "basic id": 1,
    "parameter": {
     "unit": "m³/h",
     "value": "5"
    }
   }]
  }, {
   "id": 2,
   "name": "My relaxing shower",
   "type": "ShowerRoom",
   "parameter": {
    "valve": {
     "unit": "",
     "value": "2"
    },
    "nominal": {
     "unit": "m³/h",
     "value": 50
    },
    "waranty_number": {
     "unit": "",
     "value": "Proto 002"
    }
   },
   "actuator": [{
    "name": "air valve[2]_HealthBox 3[Healthbox3]",
    "type": "air valve",
    "basic id": 2,
    "parameter": {
     "unit": "m³/h",
     "value": "50"
    }
   }]
  }, {
   "id": 3,
   "name": "My darling's kitchen",
   "type": "Kitchen",
   "parameter": {
    "valve": {
     "unit": "",
```

```json
      "value": "3"
     },
     "nominal": {
      "unit": "m³/h",
      "value": 75
     },
     "waranty_number": {
      "unit": "",
      "value": "Proto 003"
     }
    },
    "actuator": [{
     "name": "air valve[3]_HealthBox 3[Healthbox3]",
     "type": "air valve",
     "basic id": 3,
     "parameter": {
      "unit": "m³/h",
      "value": "7.5"
     }
    }]
   }, {
    "id": 4,
    "name": "My cosy chamber",
    "type": "toilet",
    "parameter": {
     "valve": {
      "unit": "",
      "value": "4"
     },
     "nominal": {
      "unit": "m³/h",
      "value": 25
     },
     "waranty_number": {
      "unit": "",
      "value": "Proto 004"
     }
    },
    "actuator": [{
     "name": "air valve[4]_HealthBox 3[Healthbox3]",
     "type": "air valve",
     "basic id": 4,
     "parameter": {
      "unit": "m³/h",
      "value": "25"
     }
    }]
   }, {
    "id": 5,
    "name": "Stacey's Room",
    "type": "BedRoom",
    "parameter": {
     "valve": {
```

```json
      "unit": "",
      "value": "5"
     },
     "nominal": {
      "unit": "m³/h",
      "value": 30
     },
     "waranty_number": {
      "unit": "",
      "value": "Proto 005"
     }
    },
    "actuator": [{
     "name": "air valve[5]_HealthBox 3[Healthbox3]",
     "type": "air valve",
     "basic id": 5,
     "parameter": {
      "unit": "m³/h",
      "value": "3"
     }
```

```
        }]
    }]
}
```