

Home Automation API

This documents the current REST API for a home automation system.

Resources

[/rest/api/v1/room](#) [POST](#) [GET](#)

[/rest/api/v1/room/{roomId}](#) [PUT](#) [GET](#) [DELETE](#)

[/rest/api/v1/room/{roomId}/equipment](#) [POST](#) [GET](#)

[/rest/api/v1/room/{roomId}/equipment/{equipmentId}](#) [PUT](#) [GET](#) [DELETE](#)

[/rest/api/v1/room/{roomId}/equipment/{equipmentId}/control](#) [POST](#) [GET](#)

[/rest/api/v1/room/{roomId}/equipment/{equipmentId}/control/{controlId}](#) [PUT](#) [GET](#) [DELETE](#)

[/rest/api/v1/room/{roomId}/equipment/{equipmentId}/control/{controlId}/value](#) [POST](#) [GET](#)

/rest/api/v1/room

Methods

POST

Creates a new room

Example Request

POST /rest/api/v1/room

Headers:

Accept: application/json

Body:

```
{ "roomName": "Kitchen",  
  "squareFootage": " 125"  
}
```

Example Response

HTTP 1.1/ 200 OK

```
{ "roomId": "1",  
  "roomName": "Kitchen",  
  "squareFootage": " 125",  
  "_links": [{ "rel": "self",  
                "href": "http://localhost:8080/room/1"  
              },  
              { "rel": "equipment",  
                "href": "http://localhost:8080/room/1/equipment"  
              }  
]
```

GET

Get all rooms

Example Request

GET /rest/api/v1/room

Headers:

Accept: application/json

Example Response

HTTP/1.1 200 OK

Headers:

Body:

```
[{ "roomName": "Kitchen",
  "squareFootage": " 125",
  "_links": [{ "rel": "self",
    "href": "http://localhost:8080/room/1"
  },
    { "rel": "equipment",
      "href": "http://localhost:8080/room/1/equipment"
    }
  ],
  { "roomId": "2",
    "roomName": "Dining Room",
    "squareFootage": "100",
    "_links": [{ "rel": "self",
      "href": "http://localhost:8080/room/2"
    },
      { "rel": "equipment",
        "href": "http://localhost:8080/room/2/equipment"
      }
    ]
  }
]
```

/rest/api/v1/room/{roomId}

Methods

PUT

Updates a room

Example Request

PUT /rest/api/v1/room/1

Headers:

Content-Type: application/json

Content-Length:

Body:

```
{ "roomName": "Kitchen",
  "squareFootage": " 125"
```

```
}
```

Example Response

HTTP/1.1 200 OK

Headers:

Body:

```
{ "roomId": "1",  
  "roomName": "Kitchen",  
  "squareFootage": " 125",  
  "_links": [{ "rel": "self",  
                "href": "http://localhost:8080/room/1"  
              },  
              { "rel": "equipment",  
                "href": "http://localhost:8080/room/1/equipment"  
              }  
]
```

```
}
```

GET

Get a room

Example Request

GET /rest/api/v1/room/1

Headers:

Accept: application/json

Example Response

HTTP/1.1 200 OK

Headers:

Content-Type: application/json

Content-Length:

Body:

```
{ "roomId": "1",  
  "roomName": "Kitchen",  
  "squareFootage": " 125",  
  "_links": [{ "rel": "self",  
                "href": "http://localhost:8080/room/1"  
              },  
              { "rel": "equipment",  
                "href": "http://localhost:8080/room/1/equipment"  
              }  
]
```

```
}
```

DELETE

Deletes a room

Example Request

DELETE /rest/api/v1/room/1

Example Response
HTTP/1.1 204 No Content

/rest/api/v1/room/{roomId}/equipment

Methods

POST

Adds an equipment to a room

Example Request

POST /rest/api/v1/room/1/equipment

Headers:

Content-Type: application/json

Content-Length:

Body:

```
{ "equipmentName": "Thermostat" }
```

Example Response

HTTP/1.1 200 OK

Headers:

Content-Type: application/json

Content-Length:

Body:

```
{ "equipmentId": "1",  
  "equipmentName": "Thermostat",  
  "_links": [{ "rel": "self",  
                "href": "http://localhost:8080/room/1/equipment/1"  
              },  
              { "rel": "parent",  
                "href": "http://localhost:8080/room/1"  
              },  
              { "rel": "control",  
                "href": "http://localhost:8080/room/1/equipment/1/control"  
              }  
]
```

GET

Gets all equipments in a room

Example Request

GET /rest/api/v1/room/1/equipment

Headers:

Accept: application/json

Example Response

HTTP/1.1 200 OK

Headers:

Content-Type: application/json

Content-Length:

Body:

```
[{ "equipmentId": "1",
  "equipmentName": "Thermostat",
  "_links": [{ "rel": "self",
    "href": "http://localhost:8080/room/1/equipment/1"
  },
    { "rel": "parent",
    "href": "http://localhost:8080/room/1"
  },
    { "rel": "control",
    "href": "http://localhost:8080/room/1/equipment/1/control"
  }
  ],
  { "equipmentId": "2",
    "equipmentName": "Ceiling Fan",
    "_links": [{ "rel": "self",
      "href": "http://localhost:8080/room/1/equipment/2"
    },
      { "rel": "parent",
      "href": "http://localhost:8080/room/1"
    },
      { "rel": "control",
      "href": "http://localhost:8080/room/1/equipment/2/control"
    }
    ]
  }
]
```

/rest/api/v1/room/{roomId}/equipment/{equipmentId}

Methods

PUT

Updates an equipment

Example Request

PUT /rest/api/v1/room/1/equipment/1

Headers:

Content-Type: application/json

Content-Length:

Body:

```
{ "equipmentName": "Thermostat" }
```

Example Response

HTTP/1.1 200 OK

Headers:

Content-Type: application/json

Content-Length:

Body:

```
{ "equipmentId": "1",
  "equipmentName": "Thermostat",
  "_links": [{ "rel": "self",
                "href": "http://localhost:8080/room/1/equipment/1"
              },
              { "rel": "parent",
                "href": "http://localhost:8080/room/1"
              },
              { "rel": "control",
                "href": "http://localhost:8080/room/1/equipment/1/control"
              }
            ]
}
```

GET

Get an equipment

Example Request

GET /rest/api/v1/room/1/equipment/1

Headers:

Accept: application/json

Example Response

HTTP/1.1 200 OK

Headers:

Content-Type: application/json

Content-Length:

Body:

```
{ "equipmentId": "1",
  "equipmentName": "Thermostat",
  "_links": [{ "rel": "self",
                "href": "http://localhost:8080/room/1/equipment/1"
              },
              { "rel": "parent",
                "href": "http://localhost:8080/room/1"
              },
              { "rel": "control",
                "href": "http://localhost:8080/room/1/equipment/1/control"
              }
            ]
}
```

DELETE

Example Request

DELETE /rest/api/v1/room/1/equipment/1

Example Response

HTTP/1.1 204 No Content

/rest/api/v1/room/{roomId}/equipment/{equipmentId}/control

Methods

POST

Adds a control to an equipment

Example Request

POST /rest/api/v1/room/1/equipment/1/control

Body:

```
{ "controlName": "coolingSetpoint" }
```

Headers:

Content-Type: application/json

Content-Length:

Example Response

HTTP/1.1 200 OK

Headers:

Content-Type: application/json

Content-Length:

Body:

```
{ "controlId": "1",
  "controlName": "coolingSetpoint",
  "_links": [{ "rel": "self",
                "href": "http://localhost:8080/room/1/equipment/1/control/1"
              },
              { "rel": "parent",
                "href": "http://localhost:8080/room/1/equipment"
              },
              { "rel": "value",
                "href":
"http://localhost:8080/room/1/equipment/1/control/value"
              }
            ]
}
```

GET

Get all controls for an equipment

Example Request

GET /rest/api/v1/room/1/equipment/1/control

Headers:

Accept: application/json

Example Response

HTTP/1.1 200 OK

Headers:

Content-Type: application/json

Content-Length:

Body:

```
[{ "controlId": "1",
  "controlName": "coolingSetpoint",
  "_links": [{ "rel": "self",
    "href": "http://localhost:8080/room/1/equipment/1/control/1"
  },
    { "rel": "parent",
    "href": "http://localhost:8080/room/1/equipment"
  },
    { "rel": "value",
    "href":
"http://localhost:8080/room/1/equipment/1/control/value"
  }
  ],
  { "controlId": "2",
    "controlName": "heatingSetpoint",
    "_links": [{ "rel": "self",
      "href": "http://localhost:8080/room/1/equipment/1/control/1"
    },
      { "rel": "parent",
      "href": "http://localhost:8080/room/1/equipment"
    },
      { "rel": "value",
      "href":
"http://localhost:8080/room/1/equipment/1/control/value"
    }
    ],
    { "controlId": "3",
      "controlName": "currentTemperature",
      "_links": [{ "rel": "self",
        "href": "http://localhost:8080/room/1/equipment/1/control/1"
      },
        { "rel": "parent",
        "href": "http://localhost:8080/room/1/equipment"
      },
        { "rel": "value",
        "href":
"http://localhost:8080/room/1/equipment/1/control/value"
      }
      ]
    }
  ]
}
```


/rest/api/v1/room/{roomId}/equipment/{equipmentId}/control/{controlId} **}**

Methods

PUT

Updates a control

Example Request

PUT /rest/api/v1/room/1/equipment/1/control/1

Body:

```
{ controlName: "currentTemperature" }
```

Headers:

Content-Type: application/json

Content-Length:

Example Response

HTTP/1.1 200 OK

Headers:

Content-Type: application/json

Content-Length:

Body:

```
{ "controlId": "1",  
  "controlName": "coolingSetpoint",  
  "_links": [{ "rel": "self",  
                "href": "http://localhost:8080/room/1/equipment/1/control/1"  
              },  
              { "rel": "parent",  
                "href": "http://localhost:8080/room/1/equipment"  
              },  
              { "rel": "value",  
                "href":  
"http://localhost:8080/room/1/equipment/1/control/value"  
              }  
]
```

GET

Gets a control

Example Request

GET /rest/api/v1/room/1/equipment/1/control/1

Headers:

Accept: application/json

Example Response

HTTP/1.1 200 OK

Headers:

Content-Type: application/json

Content-Length:

Body:

```
{ "controlId": "1",
  "controlName": "coolingSetpoint",
  "_links": [{ "rel": "self",
                "href": "http://localhost:8080/room/1/equipment/1/control/1"
              },
              { "rel": "parent",
                "href": "http://localhost:8080/room/1/equipment"
              },
              { "rel": "value",
                "href":
"http://localhost:8080/room/1/equipment/1/control/value"
              }
            ]
}
```

DELETE

Example Request

DELETE /rest/api/v1/room/1/equipment/1/control/1

Example Response

HTTP/1.1 204 No Content

/rest/api/v1/room/{roomId}/equipment/{equipmentId}/control/{controlId}/value

Methods

POST

Updates the value for a control

Example Request

POST /rest/api/v1/room/1/equipment/1/control/1/value

Headers:

Content-Type: application/json

Content-Length:

Body:

```
{ "68.0" }
```

Example Response

HTTP/1.1 200 OK

Headers:

Content-Type: application/json

Content-Length:

Body:

```
{ "value": "68.0",
```

```
    "_links": [{ "rel": "self",
                  "href":
"http://localhost:8080/room/1/equipment/1/control/1/value"
                },
                { "rel": "parent",
                  "href": "http://localhost:8080/room/1/equipment"
                }
              ]
}
```

GET

Gets a value for a control

Example Request

GET /rest/api/v1/room/1/equipment/1/control/1/value

Headers:

Accept: application/json

Example Response

HTTP/1.1 200 OK

Headers:

Content-Type: application/json

Content-Length:

Body:

```
{ "value": "68.0",
  "_links": [{ "rel": "self",
                "href":
"http://localhost:8080/room/1/equipment/1/control/1/value"
              },
              { "rel": "parent",
                "href": "http://localhost:8080/room/1/equipment"
              }
            ]
}
```