

Booking Software & Building Controlling System
Data Exchange Protocol
Nordic Standard

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Companies that conforms to this standard/document

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Introduction

The goal with this standard is to simplify and unify the data exchanges between booking administration softwares and building controlling systems.

This standards is in it's early stage and will be update regularly in the coming months.

Abbreviations and explanations

Booking administration software: is refereed to a administration software where a user have the ability to schedule the use of on or more resources.

In this document Booking Administration Software will be shorted to BAS.

Building controlling systems: is refereed to systems that in one way or another controls a building and/or it's surroundings.

In this document Building Controlling Systems will be shorted to BCS.

Data Transfer

The data are to be transferred with HTTP as POST.

The URL shall always be the same regardless of what method is invoked.

All transfers are initiated by the BCS. Thus all requests will be made by a BCS and all responses come from a BAS.

HTTP Keep-Alive are preferred.

Request/response payload

The payload data must be formatted as valid **JSON**.

All variable names are **case sensitive**.

The order of variables is **not predetermined** and can be in any order within the JSON object.

All ID values must be valid GUID/UUID string.

Every request must include a variable called “appID” which contains a unique identification of the BCS system so that the BAS can filter unwelcome requests.

TODO: A verification with some sort of hashing needs to be implemented.

Fetching customer data

This method request information about the customer and their resources.

REQUEST

```
{
  "method": "GetCustomerData",
  "version": 1,
  "appId": "4e481c08-c808-4188-b128-20a5a02ebf96",
  "customers": ["e3941203-37c8-4aaf-a10c-a46100ccb787"]
}
```

RESPONSE

```
{
  "responseStatus": {
    "success": 0,
    "statusMsg": "ok"
  },
  "customers": [{
    "id": "e3941203-37c8-4aaf-a10c-a46100ccb787",
    "name": "Customer name",
    "timezone": 1,
    "resources": [{
      "id": "5817c100-d599-4f2e-9c25-07e7a64075a0",
      "name": "Location/resource one"
    }, {
      "id": "fe77c299-980e-49a2-82a5-4f42a4cadf34",
      "name": "Location/resource two"
    }
  ]
}]
}
```

Fetching resource data (local tz)

Date and time presented in local time. Timezone is a setting within the BAS.

REQUEST

```
{
  "method": "GetResourceData",
  "version": 1,
  "appId": "4e481c08-c808-4188-b128-20a5a02ebf96",
  "dateFormat": "local",
  "start": "2015-05-01",
  "end": "2016-05-01",
  "resources": [
    "5817c100-d599-4f2e-9c25-07e7a64075a0",
    "fe77c299-980e-49a2-82a5-4f42a4cadf34"
  ]
}
```

RESPONSE

```
{
  "responseStatus": {
    "success": 0,
    "statusMsg": "ok"
  },
  "list": [{
    "id": "afff431b-2835-45a1-9c5e-a100d746ea0c",
    "start": "2015-05-05T11:30:00",
    "end": "2015-05-05T12:00:00",
    "created": "2015-05-01T11:00:00",
    "signature": "Eva Andersson",
    "heat": 0,
    "title": "Booking with standard heat temp",
    "resources": [
      "fe77c299-980e-49a2-82a5-4f42a4cadf34"
    ]
  }, {
    "id": "99c42508-0e9c-4eef-af19-d7dbb48f9b27",
    "start": "2015-04-30T18:30:00",
    "end": "2015-05-02T19:30:00",
    "created": "2015-04-01T11:00:00",
    "signature": "Eva Andersson",
    "heat": -1,
    "title": "Booking with no heat",
    "resources": [
      "5817c100-d599-4f2e-9c25-07e7a64075a0",
      "0f01ce5b-0c9b-4534-b1f1-f4891511ecb1"
    ]
  }
}]
}
```


Fetching resource data (Unix epoch)

Date and time presented in epoch time. All epoch values must be interpreted as a UInt64.

REQUEST

```
{
  "method": "GetResourceData",
  "version": 1,
  "appId": "4e481c08-c808-4188-b128-20a5a02ebf96",
  "dateFormat": "epoch"
  "start": 1430438400,
  "end": 1462060800,
  "resources": [
    "5817c100-d599-4f2e-9c25-07e7a64075a0",
    "fe77c299-980e-49a2-82a5-4f42a4cadf34"
  ]
}
```

RESPONSE

```
{
  "responseStatus": {
    "success": 0,
    "statusMsg": "ok"
  },
  "list": [
    {
      "id": "afff431b-2835-45a1-9c5e-a100d746ea0c",
      "start": 1430825400,
      "end": 1430827200,
      "created": 1430478000,
      "signature": "Eva Andersson",
      "heat": 0,
      "title": "Booking with standard heat temp",
      "resources": [
        "fe77c299-980e-49a2-82a5-4f42a4cadf34"
      ]
    },
    {
      "id": "99c42508-0e9c-4eef-af19-d7dbb48f9b27",
      "start": 1430418600,
      "end": 1430595000,
      "created": 1427886000,
      "signature": "Eva Andersson",
      "heat": -1,
      "title": "Booking with no heat",
      "resources": [
        "5817c100-d599-4f2e-9c25-07e7a64075a0",
        "0f01ce5b-0c9b-4534-b1f1-f4891511ecb1"
      ]
    }
  ]
}
```