

# REST-Dokumentation

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## REST-API

### WEB REST API

This is the reference document for the REST API and resources provided by SERVICE/WEB. The REST APIs are for developers who want to integrate SERVICE/WEB with other standalone or web applications and for administrators who want to script interactions with the SERVICE/WEB server.

### Getting started

As the REST API is based on open standards, any web development language can be used to access the API.

### Structure of the REST URIs

SERVICE/WEB's REST APIs provide access to resources (data entities) via URI paths. Using a REST API, the application will make a HTTP request and parse the response. The SERVICE/WEB REST API uses XML, JSON and JSONP as its communication format as well as standard HTTP methods like GET, PUT, POST and DELETE (see API descriptions below to know which methods are available for each resource). URIs for SERVICE/WEB's REST API resources have the following structure:

```
http://host:port/rest/api-version/resource-name
```

The current API version is 1.

There is a [WADL](#) document containing the documentation for each resource in the SERVICE/WEB REST API. It is available [here](#).

### Content negotiation

The Service can consume and produce XML, JSON and JSONP. The content type is defined by the HTTP header value "Accept". However, especially for AJAX requests from the browser, it is not always possible to set the header values. In this case, the desired content type can be suffixed to the url, but it has to be set in front of any query parameters.

#### Example

```
Auto: http://localhost:8080/1/projects/
XML: http://localhost:8080/1/projects/.xml
JSON: http://localhost:8080/1/projects/.json

Auto: http://localhost:8080/1/projects/?someParam=value
XML: http://localhost:8080/1/projects/.xml?someParam=value
JSON: http://localhost:8080/1/projects/.json?someParam=value
```

#### JSONP

Accessing the REST APIs from a different domain via AJAX violates the [same origin policy](#). Therefore, the [JSONP](#) technique must be used. To enable JSONP, choose the content type json and provide the query parameter "callback" within your callback function.

### Authentication

Any authentication working against SERVICE/WEB will also work against the REST API. **The preferred authentication methods are HTTP Basic (when using SSL).**

### Date and Time

All time values are returned in nano seconds by this REST service. To define a date or a timerange, a variety of methods can be chosen. Most rest function need a timerange which is defined by the two query parameter "start" and "end".

**Example:** This will return the energy used between a defined point in time and the current day.

```
1/projects/{pname}/devices/{devid}/hist/energy/{value}/{type}?start=UTC_34235345&end=NAMED_Today
```

Prefix	Description	Examples
UTC	A UTC timestamp in milli seconds. <i>Optional timezone is ignored</i>	UTC_34235345
UTCSEC	A UTC timestamp in seconds. <i>Optional timezone is ignored</i>	UTCSEC_332435345

UTCNA NO	A UTC timestamp in nano seconds. This is the format used by this REST API's reponses. <i>Optional timezone is ignored</i>	UTCNANO_3234234532435345
ISO8601	An <a href="#">ISO8601</a> date. To see the documentation visit the <a href="#">joda time homepage</a> . When called without time information the day's beginning is used. Day's end is used only if the parameter is explicitly set to a timespan's end (e. g. paramater "end").	ISO8601_2012-02-12, ISO8601_2012-12-24,
EUROP EAN	European format, either with time or without.	start=EUROPEAN_12.05.1986 results in 12.05.1986 00:00:00:00 end=EUROPEAN_12.05.1986 results in 12.05.1986 23:59:59:999 start or end=EUROPEAN_12.05.1986 12:34:10:33 results in 12.05.1986 12:34:10:33
US	MM/DD/YYYY	US_05/16/1986 US_05/16/1986 09:10:55 am US_06/25/1987 11:20:55 pm
NAMED	This allows you to use named timespans (e. g. last month). Supported values: <ul style="list-style-type: none"> <li>• Today</li> <li>• Yesterday</li> <li>• ThisWeek</li> <li>• LastWeek</li> <li>• ThisMonth</li> <li>• LastMonth</li> <li>• ThisQuarter</li> <li>• LastQuarter</li> <li>• ThisYear</li> <li>• LastYear</li> </ul> <p>These values are calculated relative to the current server time. But this anchor in time can be changed by the "anchor" query parameter. The anchor accepts any time method, especially RELATIVE.</p>	start=NAMED_LastMonth&end=NAMED_LastMonth start=NAMED_LastMonth&end=NAMED_LastMonth&anchor=EUROPEAN_12.05.1986 will result in 01.04.1986 and 30.04.1986.
RELATI VE	This allows you to use relative timespans like minus 3 month +50 minutes. Supported format: <ul style="list-style-type: none"> <li>• change := amount+</li> <li>• amount:= sign? amount type</li> <li>• sign := '+'   '-'</li> <li>• amount := 0-9*</li> <li>• type := YEAR MONTH WEEK_OF_YEAR WEEK_OF_MONTH DATE DAY_OF_YEAR DAY_OF_WEEK DAY_OF_WEEK_IN_MONTH  HOUR  HOUR_OF_DAY  MINUTE  SECOND</li> </ul> <p>For further documentation use the <a href="#">java calendar object</a> documentation.</p>	start=RELATIVE_-5YEAR From today minus five years. start=RELATIVE_-3MONTH+4DATE From today minus three month and plus four days. start=RELATIVE_+4MONTH&anchor=EUROPEAN_01.01.1986 results in 01.04.1986.

## Timezone

The timezone default is the server installation's default timezone. To change the timezone, the "timezone" query parameter can be used. Possible values can be found [here](#)

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Die WEB REST API erlaubt den Zugriff auf Projekte, Geräte und Daten.

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## Resources

### /rest/1/projects

#### Methods

#### GET

Get all loaded projects.

*available response representations:*

200

- application/json (projects) [[expand](#)]

#### PUT

Load a project into the server.

*acceptable request representations:*

- text/plain (http body as a file path on the server's file system) [[expand](#)]

*available response representations:*

200

- application/json [[expand](#)]

*available response representations:*

400

- [[expand](#)]

*available response representations:*

401

- [[expand](#)]

### /rest/1/projects/{pname}

#### Methods

#### DELETE

Mark a project not to be loaded on next server restart.

*available response representations:*

401

- [\[expand\]](#)

available response representations:

204

- [\[expand\]](#)

available response representations:

404

- [\[expand\]](#)

## GET

Retrieve information about a loaded project.

available response representations:

200

- application/json (project) [\[expand\]](#)

available response representations:

404

- [\[expand\]](#)

## /rest/1/projects/{pname}/devices

Methods

### GET

Retrieve information about all devices.

available response representations:

200

- application/json (DeviceEnt) [\[expand\]](#)

available response representations:

404

- [\[expand\]](#)

## /rest/1/projects/{pname}/devices/{devid}

resource-wide template parameters

parameter	value	description
<b>devid</b>	<i>int</i>	the numeric device id, check GET /devices
<b>pname</b>	<i>string</i>	project name

Methods

### GET

Retrieve information about a device.

available response representations:

200

- application/json (DeviceEnt) [\[expand\]](#)

available response representations:

404

- [\[expand\]](#)

## /rest/1/projects/{pname}/devices/{devid}/connectiontest

resource-wide template parameters

parameter	value	description
devid	<i>int</i>	the numeric device id, check GET /devices
pname	<i>string</i>	project name

Methods

### GET

Retrieve information about the connection of a device.

available response representations:

200

- application/json (ConnectionTestEnt) [[expand](#)]

available response representations:

404

- [[expand](#)]

## /rest/1/projects/{pname}/devices/{devid}/hist/energy/{value}/{type}

resource-wide template parameters

parameter	value	description
type	<i>string</i>	a type, e.g. L1, L2, L3, L4, L5, L2L1, L3L2, L1L3, SUM13, SUM14 and others.
value	<i>string</i>	a value name, check /hist/values

Methods

### GET

Get energy consume for given value and type from Device within given timespan. This method supports the timespan parameters, see documentation.

available response representations:

200

- (EnergyEnt) [[expand](#)]

available response representations:

204

- [[expand](#)]

## /rest/1/projects/{pname}/devices/{devid}/hist/events

Methods

### GET

/rest/1/projects/{pname}/devices/{devid}/hist/events?type

Returns events for a given timespan. This method supports the timespan parameters, see documentation.

request query parameters

parameter	value	description
type	<i>string</i>	Repeatable. A list of event types. Current list: VoltageOver, VoltageUnder, VoltageOutage, VoltageFastChange, CurrentOver, PowerFailure, PowerRecovery, DigitalInputActivated, DigitalInputDeactivated, ComparatorOutputActivated, ComparatorOutputDeactivated, TariffActivated, EmaxChannelActivated, EmaxChannelDeactivated <b>Example::</b> events?type=VoltageOutage&type=VoltageOver

available response representations:

200

- (EventEnt) [[expand](#)]

available response representations:

400

- [[expand](#)]

available response representations:

204

- [[expand](#)]

## **/rest/1/projects/{pname}/devices/{devid}/hist/flags**

Methods

### **GET**

Get Flags from the device. This method supports the timespan parameters, see documentation.

available response representations:

200

- application/json (FlagEnt) [[expand](#)]

available response representations:

204

- [[expand](#)]

## **/rest/1/projects/{pname}/devices/{devid}/hist/sequences/{sequenceType}**

resource-wide template parameters

parameter	value	description
<b>sequenceType</b>	<i>string</i>	a SequenceType, either Waveform or EffectiveValues

Methods

### **GET**

Get sequence data. This method supports the timespan parameters, see documentation.

available response representations:

200

- application/json (SequenceEnt) [[expand](#)]

available response representations:

204

- [[expand](#)]

## **/rest/1/projects/{pname}/devices/{devid}/hist/transients**

Methods

### **GET**

Get transient data. This method supports the timespan parameters, see documentation.

available response representations:

200

- application/json (TransientEnt) [[expand](#)]

available response representations:

204

- [[expand](#)]

## /rest/1/projects/{pname}/devices/{devid}/hist/values

Methods

### GET

Retrieve list of all historical values.

available response representations:

200

- application/json (ValueDescriptionEnt) [[expand](#)]

available response representations:

404

- [[expand](#)]

## /rest/1/projects/{pname}/devices/{devid}/hist/values/{value}/{type}/{timebase}

resource-wide template parameters

parameter	value	description
timebase	<i>int</i>	The timebase in seconds of the recording, in most cases 900.
type	<i>string</i>	a type, e.g. Overall, L1, L2, L3, L4, L5, L2L1, L3L2, L1L3, SUM13, SUM14, Main, Aux and others.
value	<i>string</i>	a value name, check /hist/values

Methods

### GET

/rest/1/projects/{pname}/devices/{devid}/hist/values/{value}/{type}/{timebase}?online

Get historical data. This method supports the timespan parameters, see documentation.

request query parameters

parameter	value	description
online	<i>boolean</i> Default: false	Whether the value was recorded online.

available response representations:

200

- (ValueListEnt) [[expand](#)]

available response representations:

204

- [[expand](#)]

## /rest/1/projects/{pname}/devices/{devid}/manualinput

Manual input device endpoint.

Methods

### GET

Retrieve list of all manual input values.

available response representations:

200

- application/json (ValueDescriptionEnt) [[expand](#)]

available response representations:

400

- [\[expand\]](#)

available response representations:

404

- [\[expand\]](#)

## /rest/1/projects/{pname}/devices/{devid}/manualinput/{value}/{type}/{timebase}

resource-wide template parameters

parameter	value	description
timebase	<i>int</i>	
type	<i>string</i>	a type, e.g. Overall, L1, L2, L3, L4, L5, L2L1, L3L2, L1L3, SUM13, SUM14, Main, Aux and others.
value	<i>string</i>	a value name, check /hist/values

Methods

### GET

Retrieve the information about the manual input device.

available response representations:

200

- application/json (ValueDescriptionEnt) [\[expand\]](#)

available response representations:

400

- [\[expand\]](#)

available response representations:

404

- [\[expand\]](#)

### POST

Saves value to historical data.

acceptable request representations:

- application/xml (inputvalue) [\[expand\]](#)
- application/json (inputvalue) [\[expand\]](#)

available response representations:

200

- (ValueListEnt) [\[expand\]](#)

available response representations:

400

- [\[expand\]](#)

available response representations:

401

- [\[expand\]](#)

## /rest/1/projects/{pname}/devices/{devid}/online/values

Methods

### GET

Retrieve list of all online value types.

available response representations:



200

- application/json (ValueTypeEnt) [[expand](#)]

available response representations:

404

- [[expand](#)]

## /rest/1/projects/{pname}/devices/{devid}/onlinerecord/settings

Methods

### GET

Get settings for online recording values of device.

available response representations:

200

- text/plain (OnlRecValueEnt) [[expand](#)]

### POST

Saves settings for online recording values of device.

acceptable request representations:

- application/xml (onlRecValues) [[expand](#)]
- application/json (onlRecValues) [[expand](#)]

available response representations:

200

- [[expand](#)]

available response representations:

400

- [[expand](#)]

available response representations:

401

- [[expand](#)]

## /rest/1/projects/{pname}/devices/{devid}/onlinerecord/statistics

Methods

### GET

Get statistics for online recording values of device.

available response representations:

200

- application/json (OnlRecValueStatisticEnt) [[expand](#)]

## /rest/1/projects/{pname}/onlinevalues

Methods

### GET

/rest/1/projects/{pname}/onlinevalues?value&appendValueType&timeout&timeliness

Fetch online value(s) from device(s). This call will return immediately if all requested data is "timeliness". If not all data is timeliness the request wait, but no longer than the given timeout. If a timeout occur all known data is returned. There is no guarantee that the values are measured at this same point in time. It simply the last known value known to the application. The value is as fast as possible regarding its source device.

request query parameters

parameter	value	description
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<b>value</b>	<i>string</i>	Repeatable. A list of values. Each value is specified by the query param "value" and the query content of a semicolon separated list of: <ul style="list-style-type: none"> <li>The device id</li> <li>A value e.g. U_Effective,I_Effective, PowerActive</li> <li>A type e.g. L1. The type is also repeatable by comma, eg. L1,L2,L3</li> </ul> <p><b>Example::</b> /1/projects/{pname}/onlinevalues?value={devid};U_Effective;L1,L2,L3&amp;value=23;PowerActive;L1 For possible value and type combinations please refer to <b>1/valuetypes</b></p>
<b>appendValueType</b>	<i>boolean</i>	A Boolean indicating appending the ValueType. <b>Example:</b> /1/projects/{pname}/onlinevalues?value={devid};U_Effective;L1,L2,L3&appendValueType=true
<b>timeout</b>	<i>int</i> Default: 500	Maximum wait time for values in milli seconds for all value to become timeliness.
<b>timeliness</b>	<i>int</i> Default: 60000	Defines the maximum time between the request and the last update on a value. If the value was updated in between this period it is considered timeliness. If all value are timeliness the request can return.

available response representations:

200

- [\[expand\]](#)

available response representations:

400

- [\[expand\]](#)

## /rest/1/threaddump

Methods

### GET

Get a thread dump.

available response representations:

- text/xml [\[expand\]](#)

## /rest/1/valuetypes

Methods

### GET

Retrieve information about all available value types.

available response representations:

200

- application/json [\[expand\]](#)

## /rest/1/valuetypes/{subtype}

resource-wide template parameters

parameter	value	description
<b>subtype</b>	<i>string</i>	A subtype from the list <b>/rest/valuetypes/subtypes</b>

Methods

### GET

Retrieve a value types for a specific subtype.

available response representations:

200

- [application/json \[expand\]](#)

## /rest/1/valuetypes/subtypes

Methods

### GET

All subtypes for `/rest/valuetypes/{subtype}`

available response representations:

200

- [application/json \[expand\]](#)

## /rest/common/info/language/test

Methods

### GET

available response representations:

- [application/xml \[expand\]](#)
- [application/json \[expand\]](#)

## /rest/common/info/version/full

Methods

### GET

Retrieve information about the server version

available response representations:

200

[application/json \[expand\]](#)

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The Service can consume and produce XML, JSON and JSONP. The content type is defined by the HTTP header value "Accept". However, especially for AJAX requests from the browser, it is not always possible to set the header values. In this case, the desired content type can be suffixed to the url, but it has to be set in front of any query parameters.

### Example

```
Auto: http://localhost:8080/1/projects/
XML: http://localhost:8080/1/projects/.xml
JSON: http://localhost:8080/1/projects/.json

Auto: http://localhost:8080/1/projects/?someParam=value
XML: http://localhost:8080/1/projects/.xml?someParam=value
JSON: http://localhost:8080/1/projects/.json?someParam=value
```

## JSONP

Accessing the REST APIs from a different domain via AJAX violates the [same origin policy](#). Therefore, the [JSONP](#) technique must be used. To enable JSONP, choose the content type json and provide the query parameter "callback" within your callback function.

## Authentication

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## Date and Time

All time values are returned in nano seconds by this REST service. To define a date or a timerange, a variety of methods can be chosen. Most rest function need a timerange which is defined by the two query parameter "start" and "end".

**Example:** This will return the energy used between a defined point in time and the current day.

```
1/projects/{pname}/devices/{devid}/hist/energy/{value}/{type}?start=UTC_34235345&end=NAMED_Today
```

Prefix	Description	Examples
UTC	A UTC timestamp in milli seconds. <i>Optional timezone is ignored</i>	UTC_34235345
UTCSEC	A UTC timestamp in seconds. <i>Optional timezone is ignored</i>	UTCSEC_332435345
UTCNANO NO	A UTC timestamp in nano seconds. This is the format used by this REST API's reponses. <i>Optional timezone is ignored</i>	UTCNANO_3234234532435345
ISO8601	An <a href="#">ISO8601</a> date. To see the documentation visit the <a href="#">joda time homepage</a> . <i>When called without time information the day's beginning is used. Day's end is used only if the parameter is explicitly set to a timespan's end (e. g. paramater "end").</i>	ISO8601_2012-02-12, ISO8601_2012-12-24,
EUROPEAN	European format, either with time or without.	start=EUROPEAN_12.05.1986 results in 12.05.1986 00:00:00:00 end=EUROPEAN_12.05.1986 results in 12.05.1986 23:59:59:999 start or end=EUROPEAN_12.05.1986 12:34:10:33 results in 12.05.1986 12:34:10:33
US	MM/DD/YYYY	US_05/16/1986 US_05/16/1986 09:10:55 am US_06/25/1987 11:20:55 pm
NAMED	This allows you to use named timespans (e. g. last month). Supported values: <ul style="list-style-type: none"><li>• Today</li><li>• Yesterday</li><li>• ThisWeek</li><li>• LastWeek</li><li>• ThisMonth</li><li>• LastMonth</li><li>• ThisQuarter</li><li>• LastQuarter</li><li>• ThisYear</li><li>• LastYear</li></ul> <p>These values are calculated relative to the current server time. But this anchor in time can be changed by the "anchor" query parameter. The anchor accepts any time method, especially RELATIVE.</p>	start=NAMED_LastMonth&end=NAMED_LastMonth start=NAMED_LastMonth&end=NAMED_LastMonth&anchor=EUROPEAN_12.05.1986 will result in 01.04.1986 and 30.04.1986.
RELATIVE	This allows you to use relative timespans like minus 3 month +50 minutes. Supported format: <ul style="list-style-type: none"><li>• change := amount+</li><li>• amount:= sign? amount type</li><li>• sign := '+'   '-'</li><li>• amount := 0-9*</li><li>• type := YEAR MONTH WEEK_OF_YEAR WEEK_OF_MONTH DATE DAY_OF_YEAR DAY_OF_WEEK  DAY_OF_WEEK_IN_MONTH  HOUR  HOUR_OF_DAY  MINUTE  SECOND</li></ul> <p>For further documentation use the <a href="#">java calendar object</a> documentation.</p>	start=RELATIVE_-5YEAR From today minus five years. start=RELATIVE_-3MONTH+4DATE From today minus three month and plus four days. start=RELATIVE_+4MONTH&anchor=EUROPEAN_01.01.1986 results in 01.04.1986.

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    - <http://example.com:8080/rest/1/projects/{pname}/devices/{devid}/manualinput/{value}/{type}/{timebase}> [GET, POST]
  - <http://example.com:8080/rest/1/projects/{pname}/devices/{devid}/online/values> [GET]
  - <http://example.com:8080/rest/1/projects/{pname}/devices/{devid}/onlinerecord/settings> [GET, POST]
  - <http://example.com:8080/rest/1/projects/{pname}/devices/{devid}/onlinerecord/statistics> [GET]
  - <http://example.com:8080/rest/1/projects/{pname}/onlinevalues> [GET]
  - <http://example.com:8080/rest/1/threaddump> [GET]
  - <http://example.com:8080/rest/1/valuetypes> [GET]
    - <http://example.com:8080/rest/1/valuetypes/{subtype}> [GET]
    - <http://example.com:8080/rest/1/valuetypes/subtypes> [GET]
  - <http://example.com:8080/rest/common/info>
    - <http://example.com:8080/rest/common/info/language/test> [GET]
    - <http://example.com:8080/rest/common/info/version/full> [GET]

## Resources

### /rest/1/projects

Methods

#### GET

Get all loaded projects.

*available response representations:*

200

- application/json (projects) [[expand](#)]

#### PUT

Load a project into the server.

*acceptable request representations:*

- text/plain (http body as a file path on the server's file system) [[expand](#)]

available response representations:

200

- application/json [[expand](#)]

available response representations:

400

- [[expand](#)]

available response representations:

401

- [[expand](#)]

## **/rest/1/projects/{pname}**

Methods

### **DELETE**

Mark a project not to be loaded on next server restart.

available response representations:

401

- [[expand](#)]

available response representations:

204

- [[expand](#)]

available response representations:

404

- [[expand](#)]

### **GET**

Retrieve information about a loaded project.

available response representations:

200

- application/json (project) [[expand](#)]

available response representations:

404

- [[expand](#)]

## **/rest/1/projects/{pname}/devices**

Methods

### **GET**

Retrieve information about all devices.

available response representations:

200

- application/json (DeviceEnt) [[expand](#)]

available response representations:

404

- [[expand](#)]

## /rest/1/projects/{pname}/devices/{devid}

resource-wide template parameters

parameter	value	description
devid	<i>int</i>	the numeric device id, check GET /devices
pname	<i>string</i>	project name

Methods

### GET

Retrieve information about a device.

available response representations:

200

- application/json (DeviceEnt) [[expand](#)]

available response representations:

404

- [[expand](#)]

## /rest/1/projects/{pname}/devices/{devid}/connectiontest

resource-wide template parameters

parameter	value	description
devid	<i>int</i>	the numeric device id, check GET /devices
pname	<i>string</i>	project name

Methods

### GET

Retrieve information about the connection of a device.

available response representations:

200

- application/json (ConnectionTestEnt) [[expand](#)]

available response representations:

404

- [[expand](#)]

## /rest/1/projects/{pname}/devices/{devid}/hist/energy/{value}/{type}

resource-wide template parameters

parameter	value	description
type	<i>string</i>	a type, e.g. L1, L2, L3, L4, L5, L2L1, L3L2, L1L3, SUM13, SUM14 and others.
value	<i>string</i>	a value name, check /hist/values

Methods

### GET

Get energy consume for given value and type from Device within given timespan. This method supports the timespan parameters, see documentation.

available response representations:

200

- (EnergyEnt) [[expand](#)]

available response representations:

204

- [\[expand\]](#)

## /rest/1/projects/{pname}/devices/{devid}/hist/events

Methods

### GET

/rest/1/projects/{pname}/devices/{devid}/hist/events?type

Returns events for a given timespan. This method supports the timespan parameters, see documentation.

request query parameters

parameter	value	description
type	<i>string</i>	Repeatable. A list of event types. Current list: VoltageOver, VoltageUnder, VoltageOutage, VoltageFastChange, CurrentOver, PowerFailure, PowerRecovery, DigitalInputActivated, DigitalInputDeactivated, ComparatorOutputActivated, ComparatorOutputDeactivated, TariffActivated, EmaxChannelActivated, EmaxChannelDeactivated <b>Example::</b> events?type=VoltageOutage&type=VoltageOver

available response representations:

200

- (EventEnt) [\[expand\]](#)

available response representations:

400

- [\[expand\]](#)

available response representations:

204

- [\[expand\]](#)

## /rest/1/projects/{pname}/devices/{devid}/hist/flags

Methods

### GET

Get Flags from the device. This method supports the timespan parameters, see documentation.

available response representations:

200

- application/json (FlagEnt) [\[expand\]](#)

available response representations:

204

- [\[expand\]](#)

## /rest/1/projects/{pname}/devices/{devid}/hist/sequences/{sequenceType}

resource-wide template parameters

parameter	value	description
sequenceType	<i>string</i>	a SequenceType, either Waveform or EffectiveValues

Methods

### GET

Get sequence data. This method supports the timespan parameters, see documentation.

available response representations:



200

- application/json (SequenceEnt) [[expand](#)]

available response representations:

204

- [[expand](#)]

## /rest/1/projects/{pname}/devices/{devid}/hist/transients

Methods

### GET

Get transient data. This method supports the timespan parameters, see documentation.

available response representations:

200

- application/json (TransientEnt) [[expand](#)]

available response representations:

204

- [[expand](#)]

## /rest/1/projects/{pname}/devices/{devid}/hist/values

Methods

### GET

Retrieve list of all historical values.

available response representations:

200

- application/json (ValueDescriptionEnt) [[expand](#)]

available response representations:

404

- [[expand](#)]

## /rest/1/projects/{pname}/devices/{devid}/hist/values/{value}/{type}/{timebase}

resource-wide template parameters

parameter	value	description
<b>timebase</b>	<i>int</i>	The timebase in seconds of the recording, in most cases 900.
<b>type</b>	<i>string</i>	a type, e.g. Overall, L1, L2, L3, L4, L5, L2L1, L3L2, L1L3, SUM13, SUM14, Main, Aux and others.
<b>value</b>	<i>string</i>	a value name, check /hist/values

Methods

### GET

/rest/1/projects/{pname}/devices/{devid}/hist/values/{value}/{type}/{timebase}?online

Get historical data. This method supports the timespan parameters, see documentation.

request query parameters

parameter	value	description
<b>online</b>	<i>boolean</i> Default: false	Whether the value was recorded online.

available response representations:

200

- (ValueListEnt) [[expand](#)]

available response representations:

204

- [[expand](#)]

## /rest/1/projects/{pname}/devices/{devid}/manualinput

Manual input device endpoint.

Methods

### GET

Retrieve list of all manual input values.

available response representations:

200

- application/json (ValueDescriptionEnt) [[expand](#)]

available response representations:

400

- [[expand](#)]

available response representations:

404

- [[expand](#)]

## /rest/1/projects/{pname}/devices/{devid}/manualinput/{value}/{type}/{timebase}

resource-wide template parameters

parameter	value	description
timebase	<i>int</i>	
type	<i>string</i>	a type, e.g. Overall, L1, L2, L3, L4, L5, L2L1, L3L2, L1L3, SUM13, SUM14, Main, Aux and others.
value	<i>string</i>	a value name, check /hist/values

Methods

### GET

Retrieve the information about the manual input device.

available response representations:

200

- application/json (ValueDescriptionEnt) [[expand](#)]

available response representations:

400

- [[expand](#)]

available response representations:

404

- [[expand](#)]

### POST

Saves value to historical data.

acceptable request representations:

- application/xml (inputvalue) [[expand](#)]

- application/json (inputvalue) [[expand](#)]

available response representations:

200

- (ValueListEnt) [[expand](#)]

available response representations:

400

- [[expand](#)]

available response representations:

401

- [[expand](#)]

## **/rest/1/projects/{pname}/devices/{devid}/online/values**

Methods

### **GET**

Retrieve list of all online value types.

available response representations:

200

- application/json (ValueTypeEnt) [[expand](#)]

available response representations:

404

- [[expand](#)]

## **/rest/1/projects/{pname}/devices/{devid}/onlinerecord/settings**

Methods

### **GET**

Get settings for online recording values of device.

available response representations:

200

- text/plain (OnlRecValueEnt) [[expand](#)]

### **POST**

Saves settings for online recording values of device.

acceptable request representations:

- application/xml (onlRecValues) [[expand](#)]
- application/json (onlRecValues) [[expand](#)]

available response representations:

200

- [[expand](#)]

available response representations:

400

- [[expand](#)]

available response representations:

401

- [[expand](#)]

## **/rest/1/projects/{pname}/devices/{devid}/onlinerecord/statistics**

Methods

## GET

Get statistics for online recording values of device.

available response representations:

200

- application/json (OnlRecValueStatisticEnt) [[expand](#)]

## /rest/1/projects/{pname}/onlinevalues

Methods

## GET

/rest/1/projects/{pname}/onlinevalues?value&appendValueType&timeout&timeliness

Fetch online value(s) from device(s). This call will return immediately if all requested data is "timeliness". If not all data is timeliness the request wait, but no longer than the given timeout. If a timeout occur all known data is returned. There is no guarantee that the values are measured at this same point in time. It simply the last known value known to the application. The value is as fast as possible regarding its source device.

request query parameters

parameter	value	description
value	<i>string</i>	Repeatable. A list of values. Each value is specified by the query param "value" and the query content of a semicolon separated list of: <ul style="list-style-type: none"><li>• The device id</li><li>• A value e.g. U_Effective,I_Effective, PowerActive</li><li>• A type e.g. L1. The type is also repeatable by comma, eg. L1,L2,L3</li></ul> <b>Example::</b> /1/projects/{pname}/onlinevalues?value={devid};U_Effective;L1,L2,L3&value=23;PowerActive;L1 For possible value and type combinations please refer to <b>1/valuetypes</b>
appendValueType	<i>boolean</i>	A Boolean indicating appending the ValueType. <b>Example:</b> /1/projects/{pname}/onlinevalues?value={devid};U_Effective;L1,L2,L3&appendValueType=true
timeout	<i>int</i> Default: 500	Maximum wait time for values in milli seconds for all value to become timeliness.
timeliness	<i>int</i> Default: 60000	Defines the maxium time between the request and the last update on a value. If the value was updated in between this period it is considered timeliness. If all value are timeliness the request can return.

available response representations:

200

- [[expand](#)]

available response representations:

400

- [[expand](#)]

## /rest/1/threaddump

Methods

## GET

Get a thread dump.

available response representations:

- text/xml [[expand](#)]

## /rest/1/valuetypes

Methods

## GET

Retrieve information about all available value types.

*available response representations:*

200

- application/json [[expand](#)]

## **/rest/1/valuetypes/{subtype}**

resource-wide template parameters

parameter	value	description
subtype	<a href="#">string</a>	A subtype from the list <a href="#">/rest/valuetypes/subtypes</a>

Methods

## GET

Retrieve a value types for a specific subtype.

*available response representations:*

200

- application/json [[expand](#)]

## **/rest/1/valuetypes/subtypes**

Methods

## GET

All subtypes for [/rest/valuetypes/{subtype}](#)

*available response representations:*

200

- application/json [[expand](#)]

## **/rest/common/info/language/test**

Methods

## GET

*available response representations:*

- application/xml [[expand](#)]
- application/json [[expand](#)]

## **/rest/common/info/version/full**

Methods

## GET

Retrieve information about the server version

*available response representations:*

200

application/json [[expand](#)]