DATAEAGLE®

INDUSTRIAL RADIO SYSTEMS

7000ER SERIE

The BACKEND API exposes similar information as presented by the BACKEND's SYSTEM-CONSOLE, but is intended for easy-to-use interfacing of 3rd party systems (e.g. web services, ERP, SCADA,...).

API ROOT **https://portal.dataeagle.de/api/1**

PLAYGROUND **https://portal.dataeagle.de/api/1/index.html**

SYSTEM CONSOLE **https://portal.dataeagle.de**

Basics

The BACKEND API uses HTTP Basic Authentication - your Authentication key is securely encrypted by the TLS channel. Common programming languages encode the Authorization Header automatically. The Authorization header is a string containing Base-64 encoded username and password.

```
"Authorization": "Basic " + base64_encode(username:password)
```

If you want to test the BACKEND API via the command line with cURL, try:

```
curl -H "Authorization: Basic cm1kZW1vOnJtZGVtbzc3Nw=="
    -H "Content-Tyication/json"     https://portal.dataeagle.de/api/1/me
```

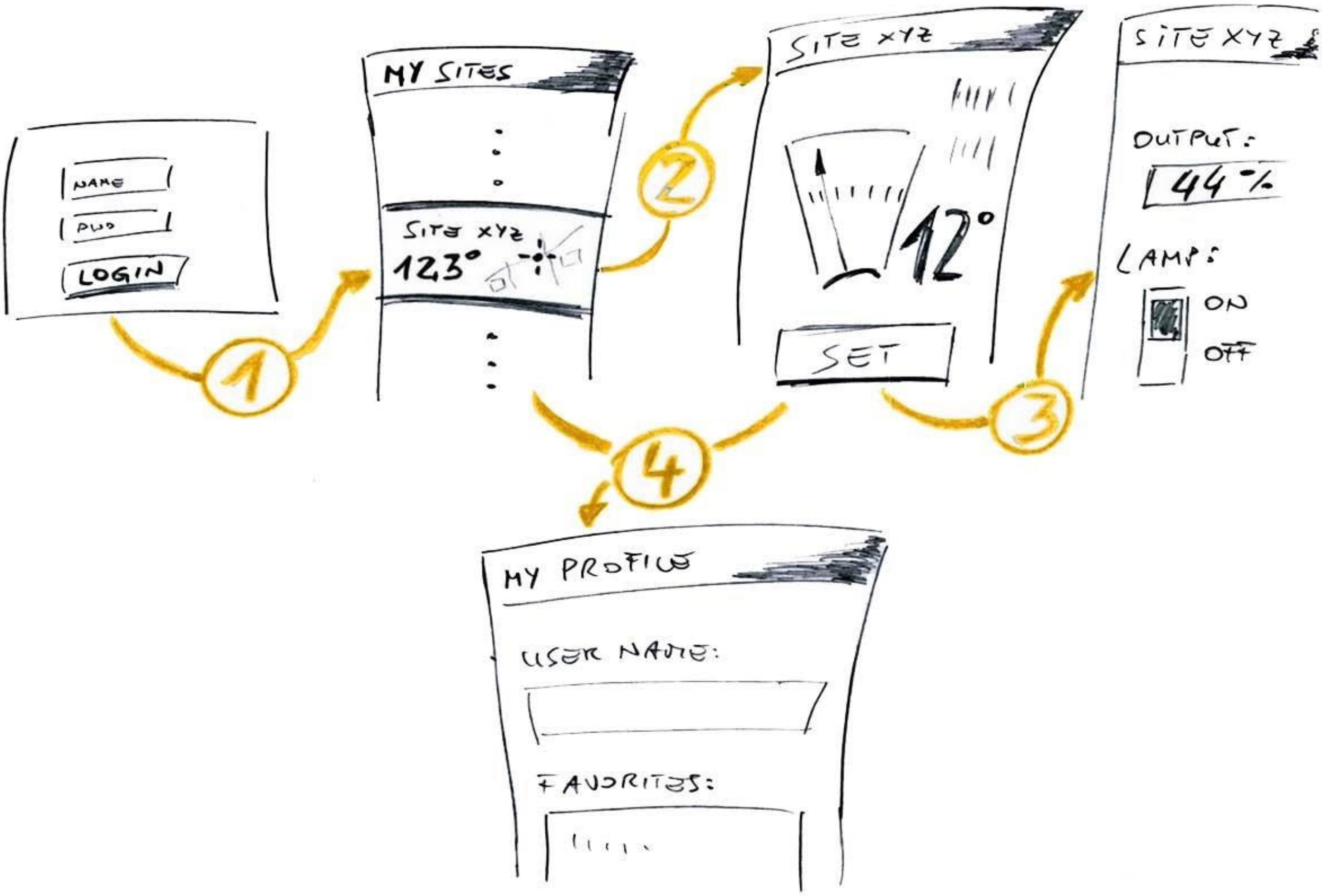
To be able to deliver a JSON body with a GET command, the parameter **json** can be used. The value must be URL encoded. Example (body is **{"select":["ch0","ch1"]}**):

```
GET
<RESOURCE_PATH>?json=%7B%22select%22%3A%5B%22ch0%22%2C%22ch1%22%5D%7D
```

The big ones (Sample)

The typical minimum frontend application includes these steps:

Query the logged-in user’s profile and customer list; End-Users are usually tighted to a



1 Ask user for his**login credentials**(username, passwprd

- `GET /me`

single customer → **<customer_id>**

GET /customers/**<customer_id>**/sites

Query a list of sites. Offer the user to select one of his sites and/or automatically choose the first one by default → **<site_id>**

2 Present (list of sites and customers) accessible for the logged-in user

GET /customers/**<customer_id>**/sites/**<site_id>**

Get the **site’s current profile** (such as online/offline)

GET /customers/**<customer_id>**/sites/**<site_id>**/config0

Present the site’s current **app-specific state** (as supplied from your machine)

GET /customers/**<customer_id>**/sites/**<site_id>**/histdata0

Paint (aggregated) **charts**

3 Show details about selected

GET /customers/**<customer_id>**/sites/**<site_id>**/config1

Present the site’s current **app-specific configuration data**

4 Allow modification of site's control values

PUT /customers/**<customer_id>**/sites/**<site_id>**/config1

Send user input (**change of configuration**) down to your machine

Show and modify **user's profile data**

GET /customers/**<customer_id>**/users

list user profile(s) → **<user_id>**

PUT /customers/**<customer_id>**/users/**<user_id>**

Modify **user's profile** data

Instant Trial

To give you an immediate real-life access to the API, we installed a real rapidM2M eval board at our premises. It collects some data and loops through some control values (detailed list of data points see below).

Some typical API calls already precompiled as shortcut-links for your convenience:

Get time series data from 2014-12-10 - temperature min/max/avg aggregated to hourly values

```
GET /1/customers/schildknecht ag - demo - aa/sites/rapidm2m-demo1/histdata0/1hr
{ "select": ["ch1 min","ch1 avg","ch1 max"],
  "from": "20141210",
  "until": "20141211"
}
```

All time series (raw) recordings from 2014-12-10

```
GET /1/customers/schildknecht ag - demo - aa/sites/rapidm2m-demo1/histdata0
{ "select": ["ch0","ch1","ch2"],
  "from": "20141210",
  "until": "20141211"
}
```

Get recent/youngest time series recording

```
GET /1/customers/schildknecht ag - demo - aa/sites/rapidm2m-demo1/histdata0/youngest
{ "select": ["ch0","ch1","ch2"] }
```

Send control values named "field2 := 999" to the device:

```
PUT /1/customers/schildknecht ag - demo - aa/sites/rapidm2m-demo1/config1
```

Get current status data

```
GET /1/customers/schildknecht ag - demo - aa/sites/rapidm2m-demo1/config0
```

Note that **config0.field2** is looped back from **config1.field2**.
Loop back is processed on-site by the local control script at the device.

List of sites/devices incl. their current status

```
GET /1/customers/schildknecht ag - demo - aa/sites
```

Profile of logged-in user

```
GET /1/me
```

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