

How to use CA4K RESTful API – ver 1.0.5

Use with CA4K 1.1.16.x or higher.

CA4K API is a framework that makes it easy to build HTTP services that reach a broad range of clients, including browsers and mobile devices. This API was built as a wrapper WebAPI form .NET CardAccess.API and returns mostly JSON data.

1. Once the API is installed, the API site will be shown as “CA4K RESTfulAPI” on IIS.
2. By default RESTful API will be setup to use port 8081.
3. All functions use Authorization.
4. First get the access_token by calling the url <http://<server ip>:8081/token>
 - a. Body keys
 - i. Username <- ca4k operator name
 - ii. Password <- ca4k operator password
 - iii. Grant_type = password
5. Use the access_token returned and token_type = bearer to call all other functions.
6. Eg1: to get badgeinfo
 - a. <http://localhost:8081/Badges/BadgeInfo?badge=1234&facility=0>
 - b. Body keys
 - i. Authorization = bearer XXXXXXXXXXXXXXXXXXXX... ← is the access_token return from token request call.
7. Eg2: Register to receive events using signalr.

```
@section scripts{
    @*test signalr*@
    @Scripts.Render("~/bundles/signalR")
    <script src="/signalr/hubs"></script>
    <script>
        $(function () {
            var alertHubService = $.connection.alertHubService;
            $.connection.hub.start().done(() => alertHubService.server.connect());

            alertHubService.client.alertReceived = function (sde) {
                console.log(sde);
            };

            alertHubService.client.hcsStatusReceived = function (message) {
                console.log(message);
            };
        });
    </script>
```

GET <http://localhost:8081/token> Send

Params Authorization Headers (9) **Body** Pre-request Script Tests Settings

none form-data x-www-form-urlencoded raw binary GraphQL

KEY	VALUE	DESCRIPTION
<input checked="" type="checkbox"/> username	admin	
<input checked="" type="checkbox"/> password	admin@4k	
<input checked="" type="checkbox"/> grant_type	password	
Key	Value	Description

Body Cookies Headers (8) Test Results Status: 200 OK Time: 26 ms Size: 1.13 KB Save

Pretty Raw Preview Visualize JSON ≡

```

1 {
2   "access_token":
3     "IA2d16DLHED0ZeS9GmG_vmmqEqV2RyGkLiXCpDqIUPy2A9zswUqttt0AVmtom9_aCXH3LjYIVba5hVcFp10v85X8f6Z05YijCxH8Pk2CaQb-5ytBP-V7N9qx84ijQQ4f9pkCk665uCwpmCnKbMP1kqOI
4     74LbXmH8ukwED0QHP6aXaKpIvF8oIOz80R-XOpLFLqanLiQvLe0raRRf7ASkeeBcMRUuakObz81_E0Dh-bMKBQ4svJwbFZQj9VJJiIKNkrqk9ggPMg6txj8FdLUGA_H5Ae1GzVX05xdnXfdAN0AtXhVvV
5     DEjo1p87mCI9jjJFqp8xEcwlXsoTfzP3ny1qsGmKUXhyD72u_GCrTQd_8RhQytJXzVlydBWcYKeq_je6Ch_PnGa54Q0xgLzqTtwzHdPSvvXn3zIuRk0MbKQUE4_7frSP1v1Rfeo28W7K7Fbs6UHKwCN7Wg!
6     3TMLeuiDTCHmu5PYWtdH4WynVDDIuofKPRLYz9Aw_EB_BrU4HsN7xhGs5d7EIGtFPug",
7   "token_type": "bearer",
8   "expires_in": 86399,
9   "badges": "null",
10  "privileges": "null",
11  "operatorId": "1eeb696c-0e28-4702-8598-c379c95b45e1",
12  "roleId": "82b19834-4ef0-405b-9ad1-23860aa4139",
13  "operatorFirstName": "admin",
14  "operatorLastName": "admin",
15  "passwordRequiresUpdate": "False",
16  ".issued": "Tue, 29 Sep 2020 15:37:01 GMT",
17  ".expires": "Wed, 30 Sep 2020 15:37:01 GMT"
18 }

```

GET http://localhost:8081/Badges/BadgeInfo?badge=1234&facility=0

Params Authorization Headers (7) Body Pre-request Script Tests Settings

Headers 6 hidden

KEY	VALUE	DESCRIPTION
<input checked="" type="checkbox"/> Authorization	bearer IA2dl6DLHEDOZeS9GmG_vmmqEqV2RyGkLxCPdQlUPy2A9zswUqttt0AVmtom9_aCO...	
Key	Value	Description

Body Cookies Headers (7) Test Results

Pretty Raw Preview Visualize JSON

```
1 {
2   "Facility": 0,
3   "Badge": 1234,
4   "FrstName": "siva",
5   "LastName": "than",
6   "MiddleName": null,
7   "Gender": "0",
8   "Enabled": true,
9   "Track": false,
10  "Pin": null,
11  "PIVI": "0",
12  "Issue": 0,
13  "Resident": true,
14  "InitLoad": true,
15  "Shunt": false,
16  "DurUse": false,
17  "Escort": false,
18  "AccessTime": 0,
19  "ActvDate": null,
20  "ExprDate": null,
21  "UseCount": 0,
22  "FirstInControl": false,
23  "APBArea": 255,
24  "APBSet": 3,
25  "HolidayCalendar": 0,
26  "HolidayCalendar": 0,
27 }
```