

Installation- and User guide for

# Cloud platform urcap documentation

Hans Skytte

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## Installation

This section will guide you to install our cloud platform on premise URCap. Follow these simple steps to get started.

1. Put the provided URCap on a USB pen
2. Insert the USB pen into the USB-slot in the teach pendant upper right corner
3. On the teach pendant go to:  
Upper right corner burger menu -> Settings -> System -> URCaps
4. Click the + button in the lower left corner next to the Exit button
5. Click the usbpen (usually something like usbdisk\_0)
6. Select the urcap and the "OK" button
7. Restart the robot

## API

The installed urcap provides a small REST API (hosted on localhost:36011) that a user can use to get data from the robot. The API contains the following endpoints:

- [GET] localhost:36011/api/get-global-variables
- [GET] localhost:36011/api/get-program-variables
- [POST] localhost:36011/api/send-to-cloud



## [GET] Get-global-variables

Description:

This endpoint reads all global variables defined in the section

- Installation -> General -> Variable

Example of invoking

```
curl localhost:36011/api/get-global-variables
```

### NOTE:

These variables is loaded from the file "default.variables" and will only be updated after a program has been run

Example of response:

```
{
  "globalVariables": [
    {
      "name": "i_var_2",
      "value": "1400918"
    },
    {
      "name": "i_var_1",
      "value": "185"
    }
  ]
}
```



## [GET] Get-program-variables

Description:

This endpoint reads all program variables in the program that is running or has just been running.

Example of invoking

```
curl localhost:36011/api/get-program-variables
```

### NOTE:

These variables also includes global variables but with the updated values in real time.

Example of response:

```
{
  "programVariables": [
    {
      "name": "i_var_2",
      "value": "1400936"
    },
    {
      "name": "i_var_1",
      "value": "185"
    },
    {
      "name": "var_1",
      "value": "1400937"
    }
  ]
}
```



## [POST] Send-to-cloud

### Prerequisites:

myur monitoring urcap must be installed and connected to the cloud before this endpoint can be used.

### Description:

This endpoint acts like an interface to myur monitoring telemetry data. It provides an option to add external data to the telemetry data object that is passed on to the cloud. This data can yet again be extracted through the Cloud API on the web.

### Example of invoking

```
curl -X POST localhost:36011/api/send-to-cloud -d '{"name": "cloudTest", "payload" : {  
"someProperty" : "someValue" } }'
```

### NOTE:

This endpoint accepts a body with json in it. This json must have two properties

- name
- payload

“name” is the identifier for the data object that the user wishes to send through the telemetry when extracting the data again from the cloud.

“payload” is the data object that the user wants to send to the cloud in a json format.

### Example of response:

```
{ "message": "Message Send successfully" }
```