This RESTFul Web application stores iotlab project sensors measurements.  
Below a descrition of how to actually consume the API.

Curl utility is used to show as an example how to use the API without  
the API but overall this has to be done through scripts.

## Insert a measurement

curl -v -H "Accept: application/json" -H "Content-type: application/json" -X POST -d ' {"measurement":{"experiment\_id":"32","resource\_id":"3232","measurement\_value":"321",  
"unit\_type":"string"}}' http://129.194.70.52:9000/measurements

## Get measurements by experiment\_id

curl -v -X GET   
129.194.70.52:9000/measurements/get\_measurement\_by\_experiment\_id.json?experiment\_id=4

## Get measurements by resource\_id

curl -v -X GET   
129.194.70.52:9000/measurements/get\_measurement\_by\_resource\_id?resource\_id=2

## Get measurements by experiment\_id && resource\_id

curl -v -X GET   
129.194.70.52:9000/measurements/get\_measurement\_by\_experimentresource?experiment\_id=32&resource\_id=3232

## Get measurements by created before

curl -v -X GET   
129.194.70.52:9000/measurements/get\_measurements\_before?date=Thu%20May%2012%2017:35:54%20CEST%202015

## Get measurements by created after

curl -v -X GET   
129.194.70.52:9000/measurements/get\_measurements\_after?date=Thu%20May%2012%2017:35:54%20CEST%202015

## Get the last measurement

curl -v -X GET   
129.194.70.52:9000/measurements/get\_measurements\_last

## Get the maximum sensor value for a given experiment and specific unit type

curl -v -X GET   
129.194.70.52:9000/measurements/get\_max?experiment\_id=32&unit\_type=celsius

## Get the minimum sensor value for a given experiment and specific unit type

curl -v -X GET   
129.194.70.52:9000/measurements/get\_min?experiment\_id=32&unit\_type=celsius

## Get the average sensor value for a given experiment and specific unit type

curl -v -X GET   
129.194.70.52:9000/measurements/get\_average?experiment\_id=32&unit\_type=celsius

## Get the availability status of a resource. Allows to verify if a resource is either available or not

curl -v -X GET   
129.194.70.52:9000/measurements/is\_resource\_availabile?resource\_id=43

Make sure the **mongod** instance on the server is running. Even if  
**sudo service mongod start** command has been executed, this doesn’t  
necessarily mean that the db is working.