

Get /api/map

Description

Get map file location and properties

Responses

HTML Code	Description	Returns
200	Successfully returned	Map Object
500	Internal Error	Error Message

Map Object Example:

```
{  
  "url": "/map.png",  
  "resolution": 0.05,  
  "origin": {  
    "x": -1.242387,  
    "y": 2.412199  
  },  
  "width": 125,  
  "height": 116  
}
```

You can reach map file from “server_ip_address:8080 + map_object.url”. If you are using server and client on same computer address will be “localhost:8080/map.png”.

Resolution and origin properties are taken from map yaml file. Width and height properties are taken from map.png dimensions.

Get /api/robot

Description

Get robot(s) infos and current location

Parameters

Type	Name	Description
string	robot_name	Robot name (optional)

Responses

HTML Code	Description	Returns
200	Successfully returned robot(s)	Robots Object
404	No robots were found	Error Message

Robots Object Example:

```
[
  {
    "robot_name": "robot0",
    "ip_address": "localhost",
    "port": 9090,
    "location_x": 0.047376922041739794,
    "location_y": -0.00040723288055429543,
    "location_th": 0.0031978882069424873
  }
]
```

If robot_name parameter is provided with request, only robot info with that name will be returned. Otherwise all robot infos will be returned.

Post /api/robot

Description

Update robot infos and location on server

Parameters

Type	Name	Description
string	robot_name	Robots unique name
string	ip_address	Robot IP Address
string	port	Rosbridge Port
double	location_x	X of location with respect to shared map
double	location_y	Y of location with respect to shared map
double	location_th	Yaw of location with respect to shared map

Responses

HTML Code	Description	Returns
200	Successfully added/updated robot	Message
403	Invalid parameters	Error Message

This API Request is for clients. Robots will use this to update server.

Post /api/twist

Description

Update robot infos and location on server

Parameters

Type	Name	Description
string	robot_name	Robots unique name
double	linear_speed	Linear speed
double	angular_speed	Angular speed

Responses

HTML Code	Description	Returns
200	Successfully added/updated robot	Message
403	Invalid parameters	Error Message
404	No Robot was found with given name	Error Message
500	Internal Error	Error Message

Post /api/initial_pose

Description

Send initial pose command to a robot

Parameters

Type	Name	Description
string	robot_name	Robot name
double	location_x	X of initial pose with respect to shared map
double	location_y	Y of initial pose with respect to shared map
double	location_th	Yaw of initial pose with respect to shared map

Responses

HTML Code	Description	Returns
200	Successfully send initial pose	Message
403	Invalid parameters	Error Message
404	No Robot was found with given name	Error Message
500	Internal Error	Error Message

Post /api/goal

Description

Send navigation goal to a robot

Parameters

Type	Name	Description
string	robot_name	Robot name
double	location_x	X of goal with respect to shared map
double	location_y	Y of goal with respect to shared map
double	location_th	Yaw of goal with respect to shared map

Responses

HTML Code	Description	Returns
200	Successfully send move base goal	Message
403	Invalid parameters	Error Message
404	No Robot was found with given name	Error Message
500	Internal Error	Error Message

Delete /api/goal

Description

Cancel navigation goal of a robot

Parameters

Type	Name	Description
string	robot_name	Robot name

Responses

HTML Code	Description	Returns
200	Successfully canceled move base goal	Message
403	Invalid parameters	Error Message
404	No Robot was found with given name	Error Message
500	Internal Error	Error Message

Post /api/clear_costmap

Description

Send clear_costmap request to a robot

Parameters

Type	Name	Description
string	robot_name	Robot name

Responses

HTML Code	Description	Returns
200	Successfully send clear_costmap request	Message
403	Invalid parameters	Error Message
404	No Robot was found with given name	Error Message
500	Internal Error	Error Message