Dashboard keep getting robot info

subscribe topic :

arobot/pose

content:

```
{
    "result": {
                "x": "",
                "y": "",
                "theta": "",
                "ts":"" //timestamp
    },
    "error": ""
}
```

subscribe topic :

arobot/state

content:

```
{
    "result": {
                "battery":
                "state" :    "Idle"                    //Idle/ Paused / Charging /Working/E-Stopped
                "ts": "" //timestamp
    },
    "error": ""
}
```

Dashboard query info

arobot/report/performance/req

arobot/report/performance

#request: arobot/report/performance/req

```
{
    "cmd_id":  "",      //unique required,  timestamp or uuid
     "start_time": "2021-07-19T07:00:00+0000",   //query start time, iso format 8601, ignored if empty
     "end_time":  "",   //query end time , iso format 8601, ignored if empty
}
```

#response: arobot/report/performance

```
{
   "cmd_id": "",
   "result":
      [
         {
            "start_time": "2021-07-19T07:58:30+0000",   //iso format 8601
            "end_time": "2021-07-19T09:58:30+0000",
            "coverage": 0.80   //80%
         },
         {
             "start_time": "2021-07-20T07:58:30+0000",
            "end_time": "2021-07-20T09:58:30+0000",
            "coverage": 0.95
         }
      ],
   "error": ""
}
```

Dashboard set cmd

arobot/cmd/req
arobot/cmd

#request: arobot/cmd/req

```
{
    "cmd_id":  "",      //unique required
    "act": "do",          //do/pause/resume/cancel
    “work_type”: “station”,  //station/room/task, if “act” is “do”, “work_type” must have value
    "target": "",        //id or name
}
```

#response: arobot/cmd

```
{
    "cmd_id":  "",     //request.cmd_id
    "result": "ok",          //  empty string if error
    "error": "",        //empty string if ok
}
```

Examples:

Subscribe to "arobot/pose" and "arobot/state" and get robot location and status per second.

Undocking and Clean Specific Area

Step 1. Publish to : arobot/cmd/req

```
{
    "cmd_id":  "a unique id, you can generate one by python uuid module",      //unique required
    "act": "do",          //do/pause/resume/cancel
    “work_type” : “room”
    "target": "a cleaning id, which we will provide",        //id or name
}
```

Step 2. wait for response
#response: arobot/cmd

```
{
    "cmd_id":  "unique id",     //request.cmd_id, its value is copied from corresponding request
    "result": "ok",          //  empty string if error
    "error": "",        //empty string if ok
}
```

if result is 'ok', robot will undock automatically and its state will be changed from 'charging' to 'working'.

Pause and Continue

Step 1. Publish to : arobot/cmd/req

```
{
    "cmd_id":  "uuid-aaaaaa",      //unique required
    "act": "pause",          //do/pause/resume/cancel
    “work_type”:””
    "target": "",           //leave it empty
}
```

Step 2. wait for response

#response: arobot/cmd

```
{
    "cmd_id":  "uuid-aaaaaa",     //request.cmd_id, its value is copied from corresponding request
    "result": "ok",          //  empty string if error
    "error": "",        //empty string if ok
}
```

if result is ok, robot's state will changed from 'working' to 'paused'

Step 3. Publish to : arobot/cmd/req

```
{
    "cmd_id":  "uuid-bbbbbb",      //unique required
    "act": "resume",          //do/pause/resume/cancel
    “work_type”:””
    "target": "",            //leave it empty
}
```

Step 4. wait for response
#response: arobot/cmd

```
{
    "cmd_id":  "uuid-bbbbbb",     //request.cmd_id, its value is copied from corresponding request
    "result": "ok",          //  empty string if error
    "error": "",        //empty string if ok
}
```

if result is ok, robot's state will changed from 'paused' to 'working'

Pause and Docking

1. Publish to : arobot/cmd/req

```
{
    "cmd_id":  "uuid-ccccc",      //unique required
    "act": "cancel",          //do/pause/resume/cancel
    “work_type”:””
    "target": "",            //leave it empty
}
```

2. wait for response
#response: arobot/cmd

```
{
    "cmd_id":  "uuid-ccccc",     //request.cmd_id, its value is copied from corresponding request
    "result": "ok",          //  empty string if error
    "error": "",        //empty string if ok
}
```

if result is ok, robot's state will changed from 'working' to 'Idle'

3. Publish to : arobot/cmd/req

```
{
    "cmd_id":  "uuid-dddd",      //unique required
    "act": "do",          //do/pause/resume/cancel
    “work_type”:”station”,
    "target": "docking_station_id, we will provide this",
}
```

4. wait for response
#response: arobot/cmd

```
{
```

```
    "cmd_id":  "uuid-dddd",     //request.cmd_id, its value is copied from corresponding request
    "result": "ok",           //  empty string if error
    "error": "",        //empty string if ok
}
```

if result is ok, robot's state will changed from 'Idle' to 'working'. After robot docking to charge station, the state will change to 'charging'