

Local IOT

This is a Http compliance API for controlling Ecowitt's IoT device in Jason format.

1. Acquire all connected IoT device list

URL: http://192.168.4.1/get_iot_device_list or http://xx.xx.xx.xx/get_iot_device_list xx.xx.xx.xx is device local ip address.

HTTP GET : get_iot_device_list:

Receive:

Name	X	Headers	Preview	Response	Initiator	Timing
get_iot_device_list				<pre>{ "command": [{ "cmd": "read_quick", "model": 1, "id": 10576, "ver": 105, "rfnet_state": 1, "battery": 2, "signal": 4 }, { "cmd": "read_quick", "model": 1, "id": 11962, "ver": 113, "rfnet_state": 1, "battery": 2, "signal": 4 }, { "cmd": "read_quick", "model": 2, "id": 2257, "ver": 101, "rfnet_state": 1, "battery": 9, "signal": 4 }] }</pre>		

```
{
  "command": [
    {
      "cmd": "read_quick",
      "model": 1,
      "id": 10576,
      "ver": 105,
      "rfnet_state": 1,
      "battery": 2,
      "signal": 4
    },
    {
      "cmd": "read_quick",
      "model": 1,
      "id": 11962,
      "ver": 113,
      "rfnet_state": 1,
      "battery": 2,
      "signal": 4
    },
    {
      "cmd": "read_quick",
      "model": 2,
      "id": 2257,
      "ver": 101,
      "rfnet_state": 1,
      "battery": 9,
      "signal": 4
    }
  ]
} // 3 IoT devices on the hub.
or
{ "command": [] } // if it is blank, then there is no device
```

Remark:

Read_quick: command type
model : 1 for WFC01 2 for AC1100
id : sub device ID eg: id = 10576 = 0x2950
ver : sub device firmware version
rfnet_state: 0 or 1 ; (hub to sub-device radio link) 0: currently offline 1 : currently online
battery 9: invalid; 0~5 battery level when <=1 low battery
signal 0: no signal 0~4 signal strength indicator.

2. Turn On the Device

URL: http://192.168.4.1/parse_quick_cmd_iot/ or http://xx.xx.xx.xx/parse_quick_cmd_iot xx.xx.xx.xx is device local ip address.

HTTP POST : parse_quick_cmd_iot:

1 Turn On WFC01 (0x1113) (after this command sent, read the device status once every two seconds to confirm the command execution status)

Send:

```
{
  "command": [ { "cmd": "quick_run",
    "on_type": 0, "off_type": 0, "always_on": 1, "on_time": 0, "off_time": 0, "val_type": 0, "val": 0, "id": 4371, "model": 1 } ]
}
```

Remark:

```
"cmd": "quick_run", // command type
"on_type": 0, // fixed to 0
"off_type": 0, // fixed to 0
"always_on": 1, // always_on (fixed to 1)
"on_time": 0, // fixed to 0
"off_time": 0, // fixed to 0
"val_type": 0, // fixed to 0
"val": 0, // fixed to 0
"id": 4371, // id = 4371 = 0x1113
"model": 1, // 1: WFC01 2: AC1100
```

2 Turn on AC1100 (0x8D1)

Send:

```
{"command":[{"cmd":"quick_run",
"on_type":0,"off_type":0,"always_on":1,"on_time":0,"off_time":0,"val_type":0,"val":0,"id":2257,"model":2}]
}
"cmd":"quick_run",          // command type
"on_type":0,                 // fixed to 0
"off_type":0,                // fixed to 0
"always_on":1,               // always_on fixed to 1
"on_time":0,                 // fixed to 0
"off_time":0,                // fixed to 0
"val_type":0,                // fixed to 0
"val":0,                     // fixed to 0
"id":2257,                   // id = 2257 = 0x8D1
"model":2                     // model : 1 WFC01  2 AC1100
```

3. Turn off the device

URL: http://192.168.4.1/parse_quick_cmd_iot/ or http://xx.xx.xx.xx/parse_quick_cmd_iot xx.xx.xx.xx is device local ip address.

HTTP_POST : parse_quick_cmd_iot:

Turn Off WFC01 (0x1113):

Send:

```
{"command":[{"cmd":"quick_stop","id":4371,"model":1}]}
Remark:
"cmd":"quick_stop", //quick_stop
"id":4371,           // id = 4371 =0x1113
"model":1            // 1:WFC01  2 :AC1100
```

Turn Off the AC1100 (0x8D1)

Send:

```
{"command":[{"cmd":"quick_stop","id":2257,"model":2}]}
Remark:
"cmd":"quick_stop", //
"id":2257,           // id = 2257 = 0x8D1
"model":2            // model 1:WFC01  2: AC1100
```

4. Acquire specified device information

URL:http://192.168.4.1/parse_quick_cmd_iot/ or http://xx.xx.xx.xx/parse_quick_cmd_iot xx.xx.xx.xx is device local ip address.

HTTP_POST : parse_quick_cmd_iot:

1) Read ID 4371 WFC01 device information.

Send:

```
{"command":[{"cmd":"read_device","id":4371,"model":1}]}

```

Receive:

```
{
"command":[{"
"model":1,"id":4371,"nickname":"WFC01-
00001113","devicename":"ijtACsNMWkIKzX8rf3yQ","version":103,"water_status":0,"warning":16,"always_on":
1,"val_type":1,"val":0,"run_time":11115,"wfc01batt":0,"rssi":4,"gw_rssi":-
20,"timeutc":1715335047,"publish_time":1715334144,"water_action":4,"water_running":0,"plan_status":128,"wat
er_total":10,"happen_water":10,"flow_velocity":0}]
}

```

Remark

```
"read_device"          // command type
"model":1,              // device type 1: wfc01  2:AC1100
"id":4371,              // device id = 4371 =0x1113
"nickname":"WFC01-00001113", // device name ( not changeable)
"devicename":"ijtACsNMWkIKzX8rf3yQ", // device name given on server ( not changeable)
"version":101,          // version number
"water_status":0,       // valve state 0: off  1: on
"warning":16,           // warning bit 0: leak; bit 1: no water; bit 2: temp low; bit 3: temp high; bit 4: low
battery; bit 7: offline;
```

```

"always_on":1,           // =1 always on in effective; =0 by volume or time. (current working mode)
"val_type":1,           // val unit: 0:seconds 1 minutes 2 hours 3: volume (L) valid when always_on =0
"val":0,                // Quantity ( valid when always_on =0)
"run_time":11115,       // latest triggered operation running time ( seconds )
"rssi":4,              // signal strength for the sub device
"gw_rssi":-24,          // signal strength of the hub
"timeutc":1715324614,   // hub to/from sub device data update time stamp
"publish_time":1715251415, // water_action triggered time stamp .
"water_action":35,      // triggering action type ( refer to the definition listed below)
"water_running":0,      // program in progress 0: completed 1: in progress
"plan_status":128,      // unused
"water_total":10,       // history total volume ( reset to 0 after power up)
"happen_water":0.000,   // water volume when water program starts. (L = water_total - happen_water)
"flow_velocity":0.00    // flow rate (L/min) at "timeutc"
"water_temp":76.1"      // water temperature (F) at "timeutc"

```

Send:

```

{"command":[{"cmd":"read_device","id":11962,"model":1}]}

```

Receive:

```

{
  "command":[{"
    "model":1,"id":11962,"nickname":"WFC01-00002eba",
    "devicename":"lseK9WNPprBabxLkv0CQ","version":113,"water_status":0,"warning":144,"always_on":0,
    "val_type":0,"val":0,"run_time":0,"wfc01batt":0,"rssi":4,"gw_rssi":0,"timeutc":0,"publish_time":1,"water_action":35,
    "water_running":0,"plan_status":128,"water_total":0.000,"happen_water":0.000,"flow_velocity":0.00"}]}
}

```

2) Aquire AC1100 device info with ID x8D1(2257)

Send:

```

{"command":[{"cmd":"read_device","id":2257,"model":2}]}

```

Receive:

```

{
  "command":[{"
    "model":2,"id":2257,"nickname":"AC1100-000008d1",
    "devicename":"I3WN9g6Ki7DCH0tzcZRq","version":101,"ac_status":0,"warning":0,"always_on":0,"val_type":1,
    "val":10,"run_time":600,"rssi":4,"gw_rssi":42,"timeutc":1715652373,"publish_time":1715597775,"ac_action":35,
    "ac_running":0,"plan_status":0,"elect_total":25,"happen_elect":0,"realtime_power":0,"ac_voltage":224,"ac_current":0}]}
}

```

Remark

```

"model":2,           // devcie type 1: wfc01 2:AC1100
"id":2257,           // devcie id = 2257 = 0x8D1
"nickname":"AC1100-000008d1", // IOT device name
"devicename":"I3WN9g6Ki7DCH0tzcZRq", // IoT device name on the server
"version":101,       // version
"ac_status":0,       // relay state 0: off 1: on
"warning":0,         // warning bit 0: leak current detected on off state; bit 1: no load current detected when it is on (not in use now); bit 2: low current (not in use now); bit 3: over load ; bit 4: relay abnormal; bit 7: not connected on radio;
"always_on":0,       // =1 always on in effective; =0 by time. (current working mode)
"val_type":1,        // run_time unit 0:seconds 1 minutes (valid when always_on =0)
"val":10,            // QTY (valid when always_on =0)
"run_time":600,      // latest triggered operation running time ( seconds )
"rssi":4,            // sub device signal strength detected by the gateway.
"gw_rssi":-42,       // sub device reported gateway signal strength.
"timeutc":1715652373, // hub to/from sub device data update time stamp
"publish_time":1715597775, // ac_action triggered time stamp

"ac_action":35,      // triggering action type, refer to the remarks for details.
"ac_running":0,      // program in progress 0: completed 1: in progress
"plan_status":0,     // unused
"elect_total":25,    // history total w.h ( reset to 0 after power up)

```

```
"happen_elect":0,           // w.h reading when program starts. (w.h = elect_total - happen_elect)
"realtime_power":0,        // power meter reading when time is "timeutc"
"ac_voltage":224,          // power voltage at "timeutc"
"ac_current":0             // power current at "timeutc"
```

ACTION Triggering Source:

```
0=>'IDEL RUN'           // reset state
1=>'BUTTON RUN'         //button triggered run
2=>'BUTTON STOP'        //button triggered stop
3=>'QUICK RUN'          // Quick Run triggered by "ecowitt" APP
4=>'QUICK STOP'         // Quick Run stop triggered by "ecowitt" APP
5=>'SMART RUN'          // Smart triggered Run
6=>'SMART STOP'         //Smart triggered Stop
7=>'PLAN RUN'           // Plan triggered Run
// gateway triggered local operation
35=>'LOCAL RUN'         // local WLAN triggered Run
36=>'LOCAL STOP'        // local WLAN triggered Stop
```