

GIGA REST API

V2.7

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1. Authentication

1.1. Login

- Resource URL:

https://<snmp_ip>/api/login

- Request:

POST <snmp_ip>/api/login HTTP / 1.1

Host: <host name>

Authorization: Digest

username=vickwang;nc=00000001;cnonce=49153a7a0aed25a8;activation_code=5a04ec902686fb05a6b7a338b6e07760;response=MTM3Yzg1NjdhYmIzYmRjZDQ5MzhiZmExZGE2MDZINGE=

Accept: text/html

- Response:

HTTP/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Content-type: text/html

<body – index.htm>

Name	Description
Response	A base64 “string” which proves that the user knows a password. response = base64(evp-aes-256-cbc(password, key(activation_code), iv(cnonce))) key: 256 bit, iv: 128 bit EX: assume password is “admin” response = base64(evp-aes-256-cbc(admin, key(“5a04ec902686fb05a6b7a338b6e07760”), iv(“49153a7a0aed25a8”))))
nc	The nc-value is the hexadecimal count of the number of requests that the client has sent with the nonce value in this request.
cnonce	The cnonce-value is an opaque quoted “string” value provided by the client and used by both client and server to avoid chosen plaintext attacks
trackid	It is a 256-bit hex “string” converted from 128-bit integer number (UUID) used to authenticate user.
activation_code	It is a 256-bit hex “string” converted from 128-bit integer random number. It is the key of evp-aes-256-cbc during authentication.
uid	It is a 128-bit hex “string” to identify user.

1.2. Logout

- Resource URL:

https://<snmp_ip>/api/logout

- Request:

POST <snmp_ip>/api/login HTTP / 1.1

Host: <host name>

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;nonce=69153d25a8a7a0ae

Accept: text/html

- Response:

If user logout is successful, Response as below.

HTTP/1.1 401 Unauthorized

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{“error”:0} /* 0:success, 1:error */

If request method is not POST, Response as below

HTTP/1.1 400 Bad Request

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{“error”:1}

1.3. Get User Privilege

- Resource URL:

https://<snmp_ip>/api/usr_priv

- Request:

GET <snmp_ip>/api/priv HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;nonce=69153d25a8a7a0ae

- Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

```
{
  "usr_privilege":integer,      /*3: admin, 2:Outlet Manager, 1:guest, 0: no privilege*/
  "usr_logined":integer,       /* login status */
  "daisy_chain_salve":integer,  /* daisy chain salve, 1: enable, 0: disable */
  "daisy_chain_mode":integer    /* daisy chain mode, 1: enable, 0: disable */
}
```


2. Device Monitoring

- Resource URL:

https://<snmp_ip>/api/pdu_mon

- Request:

GET <snmp_ip>/api/pdu_mon HTTP / 1.1

- Response:

http/1.1 200 OK

Set-Cookie: trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

```
{
  "pdu_mon":{
    "local":{"/* refer section 2.1 */},
    "daisy01":{"/* refer section 2.1 */},
    .....
    "daisy15":{"/* refer section 2.1 */},
    "inlet_status": {
      "snmp_valid":integer
      "valid":integer,
      "name":"string",
      "master_en":"integer    /* daisy chain mode, 1: enable, 0: disable */
    },
    "net_connect":{"/* refer section 2.5*/},
    "alarm":{"/*refer section 2.6 */}
  }
}
```

2.1. PDU

- Resource URL:

https://<snmp_ip>/api/pdu_mon/<local or daisy01~daisy15>

- Request:

GET <snmp_ip>/api/pdu_mon/<local or daisy01~daisy15> HTTP / 1.1

- Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

```
{
```

```

    "local":{
        "inlet":{ /*refer section 2.2*/ },
        "outlet":{ /*refer section 2.3*/ },
        "emd":{ /*refer section 2.4*/ }
    }
}

```

2.2. Inlet

■ Resource URL:

https://<snmp_ip>/api/pdu_mon/<local or daisy01~daisy15>/inlet

■ Request:

GET <snmp_ip>/api/pdu_mon/<local or daisy01~daisy15>/inlet HTTP / 1.1

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

```

{
    "info":{
        "valid":integer,
        "name":"string",          /* maximum length is 31. */
        "bid":integer,            /* Board ID*/
                                   /* Bit0: Force is 1 */
                                   /* Bit1: 1/3 Phase. 0 is 1-Phase, 1 is 3-Phase */
                                   /* Bit9: Inlet/Outlet. 0 is Inlet, 1 is Outlet */
                                   /* Bit10: CT Channel. 0 is 1CH, 1 is 2CH */
                                   /* Bit11: Current Breaker. 0 is 16A, 1 is 32A. */
                                   /* Bit15: A2 Format Bitmap, must is 1*/

        "fw_type":integer,        /* Firmware Type */
        "fw_ver":integer,         /* Firmware Version */
        "volt_ph1":integer,        /* Unit:0.1V */
        "volt_ph2":integer,
        "volt_ph3":integer,
        "freq_ph1":integer,        /* Unit:0.1Hz */
        "freq_ph2":integer,
        "freq_ph3":integer,
        "pf_ph1_b1":integer,       /* Unit:0.01 */
        "pf_ph2_b1":integer,
    }
}

```

```

"pf_ph3_b1":integer,
"pf_ph1_b2":integer,
"pf_ph2_b2":integer,
"pf_ph3_b2":integer,
"current_ph1_b1":integer, /* Unit:0.01A */
"current_ph1_b2":integer,
"current_ph2_b1":integer,
"current_ph2_b2":integer,
"current_ph3_b1":integer,
"current_ph3_b2":integer,
"act_power_ph1":integer, /* Unit:0.1W */
"act_power_ph2":integer,
"act_power_ph3":integer,
"app_power_ph1":integer, /* Unit:0.1VA */
"app_power_ph2":integer,
"app_power_ph3":integer,
"ract_power_ph1":integer, /* Unit:0.1Var */
"ract_power_ph2":integer,
"ract_power_ph3":integer,
"energy_ph1":integer, /* Unit:1WH */
"energy_ph2":integer,
"energy_ph3":integer,
"energy_total":integer,
"energy_time_ph1":"string",
"energy_time_ph2":"string",
"energy_time_ph3":"string",
"energy_time_total":"string",
"load_balance":integer, /* Unit:% */
"evt_over_load":integer, /* Bitmap bit0: critical , bit1: warning */

"evt_status_ph1":integer, /* Bitmap bit0: critical , bit1: warning */
/* bit2: current b1 critical, bit3: current b1 warning */
/* bit4: voltage critical, bit5: voltage warning */
/* bit6: current b2 critical, bit7: current b2 warning */
/* bit8: balance critical, bit9: balance warning */
/* bit10: total current critical */
/* bit11: total current warning */

"evt_status_ph2":integer, /* Bitmap bit0: critical , bit1: warning */
/* bit2: current b1 critical, bit3: current b1 warning */

```

```

/* bit4: voltage critical, bit5: voltage warning */
/* bit6: current b2 critical, bit7: current b2 warning */
/* bit8: balance critical, bit9: balance warning */
/* bit10: total current critical */
/* bit11: total current warning */

"evt_status_ph3":integer, /* Bitmap bit0: critical , bit1: warning */
/* bit2: current b1 critical, bit3: current b1 warning */
/* bit4: voltage critical, bit5: voltage warning */
/* bit6: current b2 critical, bit7: current b2 warning */
/* bit8: total current critical */
/* bit9: total current warning */

"evt_load_balance":integer, /* Bitmap bit0: critical , bit1: warning */
"rcm_valid":integer, /* 1:valid, 0:invalid */
"rcm_current":integer, /* Unit: 0.1mA, Range is 0~600*/
"rcm_alarm":integer, /* 1: alarm, 0 is normal*/
"power_src":integer,
"charge_err":integer, /* only for STIHL */
"rcm_bit":integer /* Residual current mA */
}
}

```

2.3. Outlet

- Resource URL:

https://<snmp_ip>/api/pdu_mon/<local or daisy01~daisy15>/outlet

- Request:

GET <snmp_ip>/api/pdu_mon/<local or daisy01~daisy15>/outlet HTTP / 1.1

- Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

```

{
  "outlet":{
    "port_size":integer,
    "info":[
      /*refer section 2.3.1*/
    ],

```

```

    "seq_flag":integer
  }
}

```

2.3.1. Outlet Information

■ Resource URL:

https://<snmp_ip>/api/pdu_mon/<local or daisy01~daisy15>/outlet/info

■ Request:

GET <snmp_ip>/api/pdu_mon/<local or daisy01~daisy15>/outlet/info HTTP / 1.1

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

```

{
  "info":{ /* array size is 64 */
    "valid": [ integer, .....],
    "name":["string", .....], /* maximum length is 31. */
    "bid": [ integer, .....], /* Board ID */
                                /* Bit0: Force is 1 */
                                /* Bit1: 1/3 Phase. 0 is 1-Phase, 1 is 3-Phase */
                                /* Bit9: Inlet/Outlet. 0 is Inlet, 1 is Outlet */
                                /* Bit10: Outlet 2P/6P. 0 is 2-Port, 1 is 6-Port */
                                /* Bit11: Relay Type. 0 is relay, 1 is non-relay */
                                /* Bit12: Meter Type. 0 is meter, 1 is non-meter */
                                /* Bit15: A2 Format Bitmap, must is 1 */

    "fw_type": [ integer, .....], /* Firmware Type */
    "fw_ver": [ integer, .....], /* Firmware Version */
    "rly_state": [ integer, .....], /*0:relay off, 1:relay on*/
    "evt_status": [ integer, .....], /* Bitmap bit0: critical , bit1: warning */
                                /* bit2: current critical, bit3: current warning */
                                /* bit4: power critical, bit5: power warning */

    "volt": [ integer, .....], /* Unit:0.1V */
    "current": [ integer, .....], /* Unit:0.01A */
    "pf": [ integer, .....], /* Unit:0.01 */
    "act_power": [ integer, .....], /* Unit:0.1W */
    "app_power": [ integer, .....], /* Unit:0.1VA */
    "energy":[ integer, .....], /* Unit:1WH */
  }
}

```

```

        "energy_time": ["string", .....],
        "rly_cnt" :[ integer, .....],
        "charge_state" :[ integer, .....]      /* only for STIHL */
    }

```

2.4. EMD

- Resource URL:

https://<snmp_ip>/api/deb_mon/<local or daisy01~daisy15>/emd

- Request:

GET <snmp_ip>/api/pdu_mon/<local or daisy01~daisy15>/emd HTTP / 1.1

- Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

```

{
    "emd":{ /* array size is 8 */
        "valid": [integer, .....],
        "version":["string", .....],
        "type": [integer, .....],
        "name":["string", .....],
        "temp_name": ["string", .....],
        "humi_name": ["string", .....],
        "alarm1_name": ["string", .....],
        "alarm2_name": ["string", .....],
        "temp": [integer, .....],      /* Unit:0.1C */
        "humi": [integer, .....],      /*Unit:0.1%*/
        "temp_st": [integer, .....],    /*bit0:Warning, bit1: Critical, bit2: High, bit3:Low*/
        "humi_st": [integer, .....],    /*bit0:Warning, bit1: Critical, bit2: High, bit3:Low*/
        "alarm1": [integer, .....],     /* 0:invalid, 1:alarm non-triggered, 2:alarm triggered */
        "alarm2":[integer, .....],      /* 0:invalid, 1:alarm non-triggered, 2:alarm triggered */
        "location_name" : ["string", .....]
    }
}

```

2.5. Network Connection

- Resource URL:

https://<snmp_ip>/api/pdu_mon/net_connect

- Request:

GET <snmp_ip>/api/pdu_mon/net_connect HTTP / 1.1

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

```
{
  "net_connect":{
    "tcp":[
      {
        "pid":integer,
        "uid":integer,
        "type":"string",
        "local_addr":"string",
        "remote_addr":"string",
        "remote_port":integer,
        "status":"string"
      },
      .....
    ],
    "tcp6":[
      {
        "pid":integer,
        "uid":integer,
        "type":"string",
        "local_addr":"string",
        "remote_addr":"string",
        "remote_port":integer,
        "status":"string"
      },
      .....
    ],
    "total_connect":integer
  }
}
```

2.6. Alarm List

Get Alarm List

■ Request URL:

https://<snmp_ip>/api/pdu_mon/alarm

■ Request:
GET <snmp_ip>/api/pdu_mon/alarm?lang=en_US HTTP 1.1
Host: localhost
Cookie:
trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;nonce=69153d25a8a7a0ae

■ Response:
HTTP/1.1 200 OK
Set-Cookie:
trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800
Accept: application/json
Content-type: application/json
{
 "last_alarm_id":integer,
 "last_alarm_time":"string",
 "last_alarm_desc":"string",
 "alarm_count":integer,
 "alarm_list":[
 {
 "alarm_idx":integer,
 "alarm_id":integer,
 "alarm_time":"string",
 "alarm_desc":"string"
 },

]
}

Name	Description
lang	en_US, de_DE, es_ES, user_1, user_2

3. Device Management

3.1. Management

- POST

- Resource URL:

- https://<snmp_ip>/api/pdu_mgmt

- Request:

- POST <snmp_ip>/api/pdu_mgmt HTTP / 1.1

- Host: localhost

- Cookie:

- trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonc
e=69153d25a8a7a0ae

- {
 “pdu_mgmt”:{
 “local”:{
 “inlet”: {
 /* refer section 3.1 */
 },
 “outlet”: {
 /* refer section 3.2 */
 },
 “emd”: {
 /* refer section 3.3 */
 }
 },
 “daisy01”:{
 “inlet”: {
 /* refer section 3.1 */
 },
 “outlet”: {
 /* refer section 3.2 */
 },
 “emd”: {
 /* refer section 3.3 */
 }
 },
 ,
 “daisy15”:{
 “inlet”: {

```

        /* refer section 3.1 */
    },
    "outlet": {
        /* refer section 3.2 */
    },
    "emd": {
        /* refer section 3.3 */
    }
},
"sched":[
    {
        /* refer section 3.4 */
    },
    .....
],
"group":[
    {
        /* refer section 3.5 */
    },
    .....
]
}
}

```

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error":0 } /* 0:success, 1:error */

■ GET

■ Request:

GET <snmp_ip>/api/pdu_mgmt HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonc
e=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

3.2. Inlet

■ POST

■ Resource URL:

https://<snmp_ip>/api/pdu_mgmt/<local or daisy01~daisy15>/inlet

■ Request:

POST <snmp_ip>/api/pdu_mgmt/<local or daisy01~daisy15>/inlet HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

{

 "inlet":{

 "energy_clr":integer, /* [bit0]:clear phase1 energy*/
 /* [bit1]:clear phase2 energy*/
 /* [bit2]:clear phase3 energy*/
 /* [bit3]:clear total energy */

 "valid":integer,

 "name":"string",

 "over_load_warn":integer,

 "over_load_crit":integer,

 "load_balance_warn":integer,

 "load_balance_crit":integer,

 "over_volt_warn_ph1":integer, /* Unit:0.1V */

 "over_volt_warn_ph2":integer,

 "over_volt_warn_ph3":integer,

 "over_volt_crit_ph1":integer,

 "over_volt_crit_ph2":integer,

 "over_volt_crit_ph3":integer,

 "over_curr_total_warn_ph1":integer, /* Unit:0.01A */

 "over_curr_total_warn_ph2":integer,

 "over_curr_total_warn_ph3":integer,

 "over_curr_total_crit_ph1":integer,

 "over_curr_total_crit_ph2":integer,

```

"over_curr_total_crit_ph3":integer,
"over_curr_b1_warn_ph1":integer,
"over_curr_b1_warn_ph2":integer,
"over_curr_b1_warn_ph3":integer,
"over_curr_b1_crit_ph1":integer,
"over_curr_b1_crit_ph2":integer,
"over_curr_b1_crit_ph3":integer,
"over_curr_b2_warn_ph1":integer,
"over_curr_b2_warn_ph2":integer,
"over_curr_b2_warn_ph3":integer,
"over_curr_b2_crit_ph1":integer,
"over_curr_b2_crit_ph2":integer,
"over_curr_b2_crit_ph3":integer,
"rcm_current_thld":integer, /*Unit is 1mA, Range 3~50 */
"over_pf_b1_crit_ph1":integer,
"over_pf_b1_crit_ph2":integer,
"over_pf_b1_crit_ph3":integer,
"over_pf_b1_warn_ph1":integer,
"over_pf_b1_warn_ph2":integer,
"over_pf_b1_warn_ph3":integer,
"over_pf_b2_crit_ph1":integer,
"over_pf_b2_crit_ph2":integer,
"over_pf_b2_crit_ph3":integer,
"over_pf_b2_warn_ph1":integer,
"over_pf_b2_warn_ph2":integer,
"over_pf_b2_warn_ph3":integer,
"charge_total_curr":integer, /* only for STIHL */
"charge_sckt_charging_crnt":integer, /* only for STIHL */
"charge_sckt_max_crnt":integer, /* only for STIHL */
"charge_sckt_max_fail":integer /* only for STIHL */
}
}

```

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error":0 } /* 0:success, 1:error */

■ GET

■ Request:

GET <snmp_ip>/api/pdu_mgmt/<local or daisy01~daisy15>/inlet HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

3.3. Outlet

■ POST

■ Resource URL:

https://<snmp_ip>/api/pdu_mgmt/<local or daisy01~daisy15>/outlet

■ Request:

POST <snmp_ip>/api/pdu_mgmt/<local or daisy01~daisy15>/outlet HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonc
e=69153d25a8a7a0ae

```
{
  "outlet":{
    "port_size":integer,
    "setting":{      /* array size is 64 */
      "valid":[integer, .....]      /* device valid */
      "energy_clr":[integer, .....]  /* 1:clear energy, 0:no action*/
      "name":["string", .....],
      "on_delay":[integer, .....],   /*bit7: 1 is enable delay */
      "off_delay":[integer, .....],  /*bit7: 1 is enable delay */
      "reboot_time":[integer, .....],
      "over_curr_warn":[integer, .....], /* Unit:0.01A */
      "over_curr_crit":[integer, .....],
      "over_power_warn":[integer, .....], /* Unit:1 */
      "over_power_crit":[integer, .....]
    },
    "rly_ctrl":{      /* array size is 8, 64Port = 8 * 8 bits */
      "imm_on":[integer, .....],
      "delay_on":[integer, .....],
      "imm_off":[integer, .....],
      "delay_off":[integer, .....],
      "cycle":[integer, .....],
      "delay_cycle":[integer, .....],
    },
    "seq_flag":integer      /*1:All outlets which were ON before Power OFF should
    be switching ON with a time delay, 0: All outlets should stay OFF*/
  }
}
```

■ Response:

http/1.1 200 OK

Set-Cookie:
trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800
Accept: application/json
Content-type: application/json
{ "error":0 } /* 0:success, 1:error */

■ GET

■ Request:

GET <snmp_ip>/api/pdu_mgmt/<local or daisy01~daisy15>/outlet HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

3.3.1. Clear Outlet Energy

■ Resource URL:

https://<snmp_ip>/api/pdu_mgmt/<local or daisy01~daisy15>/outlet/setting/energy_clr

■ Request:

POST <snmp_ip>/api/pdu_mgmt/<local or daisy01~daisy15>/outlet/setting/energy_clr HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

```
{  
    "energy_clr": integer, /* 1:clear energy, 0:no action */  
}
```

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json
{ "error":0 } /* 0:success, 1:error */

3.4. EMD

■ POST

■ Resource URL:

https://<snmp_ip>/api/pdu_mgmt/<local or daisy01~daisy15>/emd

■ Request:

POST <snmp_ip>/api/pdu_mgmt/<local or daisy01~daisy15>/emd HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonc
e=69153d25a8a7a0ae

```
{
  "emd":{ /* array size is 8 */
    "valid": [integer, .....],
    "version":["string", .....],
    "type": [integer, .....],
    "name": ["string", .....],
    "temp_name": ["string", .....],
    "humi_name": ["string", .....],
    "alarm1_name": ["string", .....],
    "alarm2_name":["string", .....],
    "temp": [integer, .....], /* Unit: 0.1C */
    "humi": [integer, .....], /* Unit: 0.1% */
    "temp_st": [integer, .....],
    "humi_st": [integer, .....],
    "temp_high_warn_en": [integer, .....], /* 0:disabled, 1:enabled */
    "temp_low_warn_en": [integer, .....], /* 0:disabled, 1:enabled */
    "temp_high_crit_en": [integer, .....], /* 0:disabled, 1:enabled */
    "temp_low_crit_en": [integer, .....], /* 0:disabled, 1:enabled */
    "temp_high_warn": [integer, .....],
    "temp_low_warn": [integer, .....],
    "temp_high_crit": [integer, .....],
    "temp_low_crit": [integer, .....],
    "temp_cali": [integer, .....], /* 0:+5.4C, 1:+4.5C, 2:+3.6C 3:+2.7C 4:+1.8C */
                                   /* 5:+0.9C, 6:+0C, 7:-0.9C, 8:-1.8C, 9:-2.7C */
                                   /* 10:-3.2C, 11:-4.5C, 12:-5.4C */
    "temp_hyst": [integer, .....], /* Unit:1C, Range is 0 ~ 20 */
    "humi_high_warn_en": [integer, .....], /* 0:disabled, 1:enabled */
  }
}
```



```

    "humi_low_warn_en": [integer, .....], /* 0:disabled, 1:enabled */
    "humi_high_crit_en": [integer, .....], /* 0:disabled, 1:enabled */
    "humi_low_crit_en": [integer, .....], /* 0:disabled, 1:enabled */
    "humi_high_warn": [integer, .....],
    "humi_low_warn": [integer, .....],
    "humi_high_crit": [integer, .....],
    "humi_low_crit": [integer, .....],
    "humi_cali": [integer, .....], /* 0:+6%, 1:+5% 2:+4%, 3:+3%, 4:+2%, 5:+1% */
                                   /* 6:+0%, 7:-1%, 8:-2%, 9:-3%, 10:-4% */
                                   /* 11:-5%, 12:-6% */
    "humi_hyst": [integer, .....], /* Unit:1%, Range is 0 ~ 20 */
    "alarm1": [integer, .....], /* 0:invalid, 1:normal, 2:alarm */
    "alarm2": [integer, .....], /* 0:invalid, 1:normal, 2:alarm */
    "alarm1_setup": [integer, .....], /* 0:disabled, 1:normal open, */
                                   /* 2:normal close */
    "alarm2_setup": [integer, .....], /* 0:disabled, 1:normal open, */
                                   /* 2:normal close */
    "location_name": ["string", .....]
    "lt_close": [integer, .....] /* Read only, 0:disabled, 1:enabled */
    "set_lt_close": [integer, .....] /* 0:disabled, 1:enabled */
}
}

```

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error":0 } /* 0:success, 1:error */

■ GET

■ Request:

GET <snmp_ip>/api/dev_mgmt/<local or daisy01~daisy15>/emd HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json
Content-type: application/json

/* refer POST content */

3.5. Schedule

■ POST

■ Resource URL:

https://<snmp_ip>/api/pdu_mgmt/sched

■ Request:

POST <snmp_ip>/api/pdu_mgmt/sched HTTP / 1.1

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

```
{  
  "sched":{  
    "ad":{  
      "one":{ /* refer section 3.5.1 */ },  
      "day":{ /* refer section 3.5.2 */ },  
      "week":{ /* refer section 3.5.3 */ },  
    },  
    "u1":{  
      "one":{ /* refer section 3.5.1 */ },  
      "day":{ /* refer section 3.5.2 */ },  
      "week":{ /* refer section 3.5.3 */ },  
    },  
    .....,  
    "u8":{  
      "one":{ /* refer section 3.5.1 */ },  
      "day":{ /* refer section 3.5.2 */ },  
      "week":{ /* refer section 3.5.3 */ },  
    },  
    "r1":{  
      "one":{ /* refer section 3.5.1 */ },  
      "day":{ /* refer section 3.5.2 */ },  
      "week":{ /* refer section 3.5.3 */ },  
    },  
  },  
}
```

```

.....,
    "r8":{
        "one":{"/* refer section 3.5.1 */ },
        "day":{"/* refer section 3.5.2 */ },
        "week":{"/* refer section 3.5.3 */ },
    },
    "l1":{
        "one":{"/* refer section 3.5.1 */ },
        "day":{"/* refer section 3.5.2 */ },
        "week":{"/* refer section 3.5.3 */ },
    },
    .....,
    "l8":{
        "one":{"/* refer section 3.5.1 */ },
        "day":{"/* refer section 3.5.2 */ },
        "week":{"/* refer section 3.5.3 */ },
    },
    "t1":{
        "one":{"/* refer section 3.5.1 */ },
        "day":{"/* refer section 3.5.2 */ },
        "week":{"/* refer section 3.5.3 */ },
    },
    .....,
    "t8":{
        "one":{"/* refer section 3.5.1 */ },
        "day":{"/* refer section 3.5.2 */ },
        "week":{"/* refer section 3.5.3 */ },
    }
}
}
}

```

■ GET

■ Request:

GET <snmp_ip>/api/pdu_mgmt/sched HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonc
e=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

3.5.1. Single Schedule

■ POST

■ Resource URL:

https://<snmp_ip>/api/pdu_mgmt/sched/<ad or u1~u8 or r1~r8 or l1~l8 or t1~t8 >/one

■ Request:

POST <snmp_ip>/api/pdu_mgmt/sched/<ad or u1~u8 or r1~r8 or l1~l8 or t1~t8 >/one

HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c

nonce=69153d25a8a7a0ae

```
{
  "one":{
    "ctrl":integer,          /* 1:enable, 0:disable */
    "name": "string",
    "action":integer,        /* 1:OnImm, 2:OnDelay, 3:OffImm, 4:OffDelay,
                             5:CycleImm, 6:CycleDelay */
    "date": "string",        /* dd/mm/yyyy hh:mm:ss */
    "bitmap":[[integer, .....],.....[integer, .....]] /* array size 8 * 128 */
                                                    /* 16PDU * 64Port = 1024bits = 8 * 128 */
  }
}
```

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error":0 } /* 0:success, 1:error */

■ GET

■ Request:

GET <snmp_ip>/api/pdu_mgmt/sched/<ad or u1~u8 or r1~r8 or l1~l8 or t1~t8 >/one

HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

3.5.2. Daily Schedule

■ POST

■ Resource URL:

https://<snmp_ip>/api/pdu_mgmt/sched/<ad or u1~u8 or r1~r8 or l1~l8 or t1~t8 >/day

■ Request:

POST <snmp_ip>/api/pdu_mgmt/sched/<ad or u1~u8 or r1~r8 or l1~l8 or t1~t8 >/day

HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

```
{
  "day":{
    "ctrl":integer,          /*1:enable, 0:disable*/
    "name": "string",
    "action":integer,        /*1:OnImm, 2:OnDelay, 3:OffImm, 4:OffDelay,
                             5:CycleImm, 6:CycleDelay */
    "time": "string",        /* hh:mm */
    "bitmap":[[integer, .....],.....[integer, .....]] /* array size 8 * 128 */
                                                    /* 16PDU * 64Port = 1024bits = 8 * 128 */
  }
}
```

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json
{ "error":0 } /* 0:success, 1:error */

■ GET

■ Request:

GET <snmp_ip>/api/pdu_mgmt/sched/<ad or u1~u8 or r1~r8 or l1~l8 or t1~t8 >/day
HTTP / 1.1
Host: localhost
Cookie:
trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK
Set-Cookie:
trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800
Accept: application/json
Content-type: application/json

/* refer POST content */

3.5.3. Weekly Schedule

■ POST

■ Resource URL:

https://<snmp_ip>/api/pdu_mgmt/sched/<ad or u1~u8 or r1~r8 or l1~l8 or t1~t8 >/week

■ Request:

POST <snmp_ip>/api/pdu_mgmt/sched/<ad or u1~u8 or r1~r8 or l1~l8 or t1~t8 >/week
HTTP / 1.1
Host: localhost
Cookie:
trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

```
{  
  "week":{  
    "ctrl":integer,          /*1:enable, 0:disable*/  
    "name": " string",  
    "action":integer,        /*1:OnImm, 2:OnDelay, 3:OffImm, 4:OffDelay,  
                             5:CycleImm, 6:CycleDelay */  
    "date":integer,          /* (0 ~ 6, Sunday is 0) */
```

```

        "time": "string",                /* hh:mm */
        "bitmap": [[integer, .....], .....[integer, .....]] /* array size 8 * 128 */
                                                    /* 16PDU * 64Port = 1024bits = 8 * 128 */
    }
}

```

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error": 0 } /* 0:success, 1:error */

■ GET

■ Request:

GET <snmp_ip>/api/pdu_mgmt/sched/<ad or u1~u8 or r1~r8 or l1~l8 or t1~t8 >/week

HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c

nonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

3.6. Grouping

■ POST

■ Resource URL:

https://<snmp_ip>/api/pdu_mgmt/group

■ Request:

POST <snmp_ip>/api/pdu_mgmt/group HTTP / 1.1

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

```
{
  "group":{
    "ad": { /* refer section 3.5.1 */ },
    "u1":{ /* refer section 3.5.1 */ },
    .....,
    "u8":{ /* refer section 3.5.1 */ },
    "r1":{ /* refer section 3.5.1 */ },
    .....,
    "r8":{ /* refer section 3.5.1 */ },
    "l1":{ /* refer section 3.5.1 */ },
    .....,
    "l8":{ /* refer section 3.5.1 */ },
    "t1":{ /* refer section 3.5.1 */ },
    .....,
    "t8":{ /* refer section 3.5.1 */ }
  }
}
```

■ GET

■ Request:

GET <snmp_ip>/api/pdu_mgmt/group HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

3.6.1. Grouping Setting

■ POST

■ Resource URL:

https://<snmp_ip>/api/dev_mgmt/group/<ad or u1~u8 or r1~r8 or l1~l8 or t1~t8>

- Request:

POST <snmp_ip>/api/dev_mgmt/grp/setting HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

```
{
  "ad":{
    "name":"string",
    "bitmap":[[integer, .....],.....[integer, .....]] /* array size 8 * 128 */
                                     /* 16PDU*64 = 1024bits = 8 * 128 */
  }
}
```

- Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

```
{ "error":0 } /* 0:success, 1:error */
```

- GET

- Request:

GET <snmp_ip>/api/pdu_mgmt/group/<ad or u1~u8 or r1~r8 or l1~l8 or t1~t8> HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

- Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

4. Network Setting

4.1. TCP/IP

■ POST

■ Resource URL:

https://<snmp_ip>/api/net/tcpip

■ Request:

POST <snmp_ip>/api/net/tcpip HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonc
e=69153d25a8a7a0ae

```
{
  "tcpip":{
    "ipv4":{
      "bootp_dhcp":integer,          /* 0:disabled, 1:enabled */
      "ip_address":"string",
      "gateway_address":"string",
      "subnet_mask":"string",
      "dns_address":["string","string"]
    },
    "ipv6":{
      "ipv6_en":integer,             /* 0:disabled, 1:enabled */
      "config_auto":integer,         /* 0:automatic, 1:DHCPV6 */
                                      /* 2>manual, 3:disable IPV6 */
      "ip_address":"string",
      "prefix_len":integer,
      "router_address":"string",
      "dns_address":["string", "string"]
    }
  }
}
```

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

```
{ "error":0 }          /* 0:success, 1:error */
```

■ GET

■ Request:

GET <snmp_ip>/api/net/tcpip HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonc
e=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

4.2. Dual Ethernet

■ POST

■ Resource URL:

https://<snmp_ip>/api/net/dual_eth

■ Request:

POST <snmp_ip>/api/net/dual_eth HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonc
e=69153d25a8a7a0ae

```
{
  "dual_eth":{
    "eth_mode":integer,           /* Ethernet Mode, range 0 ~ 3 */
                                   /* 0 is Active-Backup */
                                   /* 1 is 802.3ad */
                                   /* 2 is Balance alb */
                                   /* 3 is Bridge */
    "eth_down_delay":integer,     /*Down delay, range 0 ~ 65535 */
    "eth_up_delay":integer,       /* Up delay, range 0 ~ 65535 */
    "eth_miimon":integer,         /* Miimon(MII monitoring), range 1 ~ 65535 */
    "eth_primary":integer,        /* Primary device, Only valid Active-Backup */
                                   /* 0 is eth0, 1 is eth1 */
  }
}
```

- Response:
 - http/1.1 200 OK
 - Set-Cookie:
 - trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800
 - Accept: application/json
 - Content-type: application/json
 - { "error":0 } /* 0:success, 1:error */
- GET
 - Request:
 - GET <snmp_ip>/api/net/dual_eth HTTP / 1.1
 - Host: localhost
 - Cookie:
 - trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae
 - Response:
 - http/1.1 200 OK
 - Set-Cookie:
 - trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800
 - Accept: application/json
 - Content-type: application/json
 - /* refer POST content */

4.3. Accessible IP Setting

- POST
 - Resource URL:
 - https://<snmp_ip>/api/net/accessip
 - Request:
 - POST <snmp_ip>/api/net/accessip HTTP / 1.1
 - Host: localhost
 - Cookie:
 - trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae
 - {
 - "accessip":{ /* array size is 16 */
 - "priority" :[integer,], /*range 0~4, 0 is disable */
 - "ip_address":["string",],
 - "prefix_len":[integer,],
 - "action": [integer,] /* 1:Deny, 0:Allow */

}

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error":0 } /* 0:success, 1:error */

■ GET

■ Request:

GET <snmp_ip>/api/net/accessip HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

4.4. Security

■ POST

■ Resource URL:

https://<snmp_ip>/api/net/security

■ Request:

POST <snmp_ip>/api/net/security HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

{

 "security":{

 "access_protect_en":integer, /* 0:Disabled, 1:Enable */

 "ssh_en":integer, /* 0:Disabled, 1:Enable */

 "ssh_interval":integer, /* 0:1min, 1:5min, 2:10min, 3:30min */

 "ssh_times":integer, /* 0:5, 1:10, 2:20, 3:30, 4:100 */

```

        "ssh_block":integer,                /* 0:5min, 1:30min, 2:1hour, 3:1day */
        "snmp_en":integer,                  /* 0:Disabled, 1:Enable */
        "snmp_interval":integer,            /* 0:1min, 1:5min, 2:10min, 3:30min */
        "snmp_times":integer,               /* 0:5, 1:10, 2:20, 3:30, 4:100 */
        "snmp_block":integer,               /* 0:5min, 1:30min, 2:1hour, 3:1day */
        "http_en":integer,                   /* 0:Disabled, 1:Enable */
        "http_interval":integer,             /* 0:1min, 1:5min, 2:10min, 3:30min */
        "http_times":integer,               /* 0:5, 1:10, 2:20, 3:30, 4:100 */
        "http_block":integer,               /* 0:5min, 1:30min, 2:1hour, 3:1day */
    },
    "ca_upload":{ /* refer section 4.4.1 */ },
}

```

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error":0 } /* 0:success, 1:error */

■ GET

■ Request:

GET <snmp_ip>/api/net/accessip HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

4.4.1. CA Upload

■ POST

■ Request:

POST <snmp_ip>/api/net/security/ca_upload HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

Content-Type: multipart/form-data; boundary=-----xxxxxx...

Content-Disposition: form-data; filename=ca.sct

/* file content */

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error":0 }

■ GET

■ Request:

GET <snmp_ip>/api/net/security/ca_upload HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "progress":integer } /* the uploading % */

4.5. Network Service

■ POST

■ Resource URL:

https://<snmp_ip>/api/net/service

■ Request:

POST <snmp_ip>/api/net/service HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonc
e=69153d25a8a7a0ae

{

 "service":{

```

    "ssh_en":integer,          /* 0:Disabled, 1:Enable */
    "ssh_port":integer,
    "https_en":integer,       /* 0:Disabled, 1:Enable */
    "https_port":integer,
    "force_https":integer,    /* 0:Disabled, 1:Enable */
    "force_login":integer,
    "ping_en":integer,        /* 0:Disabled, 1:Enable */
    "modbus_tcp_en":integer   /* 0:Disabled, 1:Enable */
    "modbus_tcp_port":integer
    "radius_en":integer,     /* 0:Disabled, 1:Enable */
    "radius_ip":"string",
    "radius_port":integer,
    "radius_seckey":"string",
    "radius_timeout":integer,
    "radius_retry":integer,
    "ldap_en":integer,
    "ldap_port":integer,
    "ldap_servers":integer,
    "ldap_tls_enable":integer,
    "ldap_base_dn":integer,
    "tac_en":integer,
    "tac_servers":integer,
    "tac_port":integer,
    "tac_secret_key":integer,
    "tac_timeout":integer,
    "tac_retry_cnt":integer,
    "tac_auth_mode":integer
  },
}

```

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error":0 } /* 0:success, 1:error */

■ GET

■ Request:

GET <snmp_ip>/api/net/service HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

4.6. SNMP Setting

■ POST

■ Resource URL:

https://<snmp_ip>/api/net/snmp_setting

■ Request:

POST <snmp_ip>/api/net/snmp_setting HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

Accept: application/json

Content-type: application/json

```
{
  "snmp_setting":{
    "snmp_en":integer,                /* 0:Disabled, 1:Enable */
    "snmp_port":integer,
    "snmp_ver":integer,              /* 0:v1, 1:v2c, 2:v3 */
    "v1v2c_read":"string",          /* base64(evpaes-256-cbc) */
    "v1v2c_write":"string",         /* base64(evpaes-256-cbc) */
    "v3_user": ["string", .....],   /* array size 8 */
    "v3_sec_level": [integer, .....], /* array size 8, 0:noAuthNoPriv, */
                                         /* 1:authNoPriv, 2:authPriv */
    "v3_auth_mode": [integer, .....], /* array size 8, 0:MD5, 1:SHA */
    "v3_auth_passwd": ["string", .....], /* array size 8, base64(evpaes-256-cbc) */
    "v3_privacy_mode": [integer, .....], /* array size 8, 0:DES, 1:AES */
    "v3_privacy_passwd": ["string", .....] /* array size 8, base64(evpaes-256-cbc) */
  }
}
```

- Note 1 :
base64(evpc-aes-256-cbc) = base64(EVP-AES-256-CBC(password, key(trackid), iv(cnonce)))

- Response:
http/1.1 200 OK
Set-Cookie:
trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800
Accept: application/json
Content-type: application/json
{ "error":0 } /* 0:success, 1:error */

- GET

- Request:
GET <snmp_ip>/api/net/snmp_setting HTTP / 1.1
Host: localhost
Cookie:
trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

- Response:
http/1.1 200 OK
Set-Cookie:
trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800
Accept: application/json
Content-type: application/json

/* refer POST content */

4.7. SNMP Trap Setting

- POST

- Resource URL:
https://<snmp_ip>/api/net/snmp_trap

- Request:
POST <snmp_ip>/api/net/snmp_trap HTTP / 1.1
Host: localhost
Cookie:
trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae
Accept: application/json
Content-type: application/json
{

```

    "snmp_trap":{
        "ip_address":["string", .....],
        "evt_lev":[integer, .....],          /* 0: Critical, 1:Warning, 2: Information */
        "trap_ver":[integer, .....],        /* 0:v1, 1:v2c, 2:v3 */
        "desc":["string", .....]
    }
}

```

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error":0 } /* 0:success, 1:error */

■ GET

■ Request:

GET <snmp_ip>/api /net/snmp_trap HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

4.8. SNMP Trap Test

■ POST

■ Resource URL:

https://<snmp_ip>/api/net/snmp_test

■ Request:

POST <snmp_ip>/api/net/snmp_test HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

Accept: application/json

Content-type: application/json

```
{
  "send":integer/*0:nothing, 1~16: send test trap index (0 ~ 15). */
}
```

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

```
{ "error":0 } /* 0:success, 1:error */
```

5. General Setting

5.1. System Configuration

■ POST

■ Resource URL:

https://<snmp_ip>/api/setting/sys_config

■ Request:

POST <snmp_ip>/api/setting/sys_config HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

Accept: application/json

Content-type: application/json

```

{
  "sys_config":{
    "sys_name":"string",
    "sys_contact":"string",
    "sys_location":"string",
    "log_interval":integer,
    "web_refresh_interval":integer,
    "web_timeout_en":integer,          /* 0:Enabled, 1:Disabled */
    "web_timeout_interval":integer,    /* range is 1-3600S */
    "time_zone":integer,
    "time_format":integer,             /* 0:dd/mm/yyyy, 1:mm/dd/yyyy, */
                                         /* 2:yyyy/mm/dd */
    "time_set":integer,                /* 0:24hr, 1:12hr */
    "now_time":"string",               /* dd/mm/yy */
    "now_date":"string",               /* hh:mm:ss */
    "ntp_en":integer,                  /* 0:Enabled, 1:Disabled */
    "ntp_server":"string",
    "ntp_sync_interval":integer,
    "ntp_sync_interval_unit":integer,  /* 0:day, 1:month */
    "daylight_save_en":integer,
    "sync_mode":integer
  }
}

```

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error":0 } /* 0:success, 1:error */

■ GET

■ Request:

GET <snmp_ip>/api /setting/sys_config HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

5.2. Authentication Configuration

■ POST

■ Resource URL:

https://<snmp_ip>/api/setting/auth_config

■ Request:

POST <snmp_ip>/api/setting/auth_config HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

Accept: application/json

Content-type: application/json

```
{
  "auth_config":{
    "admin_name":"string",
    "admin_password":"string",          /* base64(evpaes-256-cbc) */
    "admin_passwd_check":"string",      /* base64(evpaes-256-cbc) */
    "admin_passwd_change":"string"      /* base64(evpaes-256-cbc) */
  }
}
```

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error":0 } /* 0:success, 1:error */

■ GET

■ Request:

GET <snmp_ip>/api /setting/auth_config HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce

e=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

5.3. iEC View Management

■ POST

■ Resource URL:

https://<snmp_ip>/api/setting/iec_mgmt

■ Request:

POST <snmp_ip>/api/setting/iec_mgmt HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonc

e=69153d25a8a7a0ae

Accept: application/json

Content-type: application/json

```
{
  "auth_config":[
    "iec_en":integer,          /* 0:Disabled, 1:Enable */
    "iec_server_ip":"string",
    "iec_server_guid":"string", /* Read only*/
    "iec_server_port":"integer",
    "iec_server_password":"string" /* base64(esp-aes-256-cbc) */
  ]
}
```

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error":0 } /* 0:success, 1:error */

■ GET

■ Request:

GET <snmp_ip>/api /setting/iec_mgmt HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonc
e=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

5.4. Maintenance

■ POST

■ Resource URL:

https://<snmp_ip>/api/setting/maintenance

■ Request:

POST <snmp_ip>/api/setting/maintenance HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonc
e=69153d25a8a7a0ae

Accept: application/json

Content-type: application/json

```
{
  "maintenance":{
    "fw_update":{ /* refer section 5.4.1 */ },
    "fw_snmp_update":{ /* refer section 5.4.2 */ },
    "reset_default":integer,      /* 0:do nothing,  1:reset to default without IP */
                                   /* 2:reboot */
    "suspend_schd":integer,
    "sys_version":"string",      /*Read only*/
    "fw_snmp_delete":integer
  }
}
```

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error":0 } /* 0:success, 1:error */

■ GET

■ Request:

GET <snmp_ip>/api /setting/maintenance HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

5.4.1. Firmware Update

■ POST

■ Request:

POST <snmp_ip>/api/setting/maintenance/fw_update HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;nonce=69153d25a8a7a0ae

Content-Type: multipart/form-data; boundary=-----xxxxxx...

Content-Disposition: form-data; filename=fw.bin

/* file content */

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error":0 }

■ GET

■ Request:

GET <snmp_ip>/api/setting/maintenance/fw_update HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "progress":integer } /* the uploading % */

5.4.2. SNMP Firmware Update

■ POST

■ Request:

POST <snmp_ip>/api/setting/maintenance/fw_snmp_update HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

Content-Type: multipart/form-data; boundary=-----xxxxxx...

Content-Disposition: form-data; filename=fw.bin

/* file content */

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error":0 }

■ GET

■ Request:

GET <snmp_ip>/api/setting/maintenance/ fw_snmp_update HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:
trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800
Accept: application/json
Content-type: application/json
{ "progress":integer } /* the uploading % */

5.5. Import/Export

5.5.1. Import

■ POST

■ Request:

POST <snmp_ip>/api/setting /import HTTP / 1.1
Host: localhost
Cookie:
trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae
Content-Type: multipart/form-data; boundary=-----xxxxxx...
Content-Disposition: form-data; filename=config.xml
/* file content */

■ Response:

http/1.1 200 OK
Set-Cookie:
trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800
Accept: application/json
Content-type: application/json
{ "error":0 }

■ GET

■ Request:

GET <snmp_ip>/api/setting /import HTTP / 1.1
Host: localhost
Cookie:
trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK
Set-Cookie:
trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800
Accept: application/json
Content-type: application/json
{ "progress":integer } /* the uploading % */

5.5.2. Export

■ GET

■ Request:

GET <snmp_ip>/api/setting /export HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

Content-Disposition: attachment; filename=conf_file.xml

/* file content */

5.6. Configure SMTP Server

■ POST

■ Resource URL:

https://<snmp_ip>/api/setting/smtp

■ Request:

POST <snmp_ip>/api/setting/smtp HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

Accept: application/json

Content-type: application/json

```
{
  "smtp":{
    "smtp_ip":"string"           /* string length is 63 */
    "smtp_port":integer,
    "smtp_sender":"string"       /* string length is 63 */
    "smtp_subject":"string"      /* string length is 31 */
    "smtp_auth_en":integer,
    "smtp_auth_user":"string",   /* string length is 31 */
    "smtp_auth_passwd":"string" /* string length is 31, base64(evpc-aes-256-cbc) */
  }
}
```

}

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error":0 } /* 0:success, 1:error */

■ GET

■ Request:

GET <snmp_ip>/api /setting/smtp HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

5.7. Email Notification Setting

■ POST

■ Resource URL:

https://<snmp_ip>/api/setting/mail_notify

■ Request:

POST <snmp_ip>/api/setting/email_notify HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

Accept: application/json

Content-type: application/json

{

 "mail_notify":{

 "recv_address":["string",],

 "mail_type": [integer,], /*0:none, 1:events, 2:events/status*/

```

    "evt_lev":[integer, .....], /* 0: Critical, 1:Warning, 2: Information */
    "desc":["string", .....]
  }
}

```

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error":0 } /* 0:success, 1:error */

■ GET

■ Request:

GET <snmp_ip>/api /setting/email_notify HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

5.8. Send Test Mail

■ POST

■ Resource URL:

https://<snmp_ip>/api/setting/test_mail

■ Request:

POST <snmp_ip>/api/net/snmp_test HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

Accept: application/json

Content-type: application/json

{

```
        "send":integer      /*0:nothing, 1~16: send test trap index (0 ~ 15). */
    }
}
```

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

```
{ "error":0 }      /* 0:success, 1:error */
```

5.9. Local User

■ POST

■ Resource URL:

https://<snmp_ip>/api/setting/local_user

■ Request:

POST <snmp_ip>/api/setting/local_user HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

Accept: application/json

Content-type: application/json

```
{
    "local_user":{
        "name":"string",
        "password":"string",    /* base64(evpaes-256-cbc) */
        "privilege":integer,    /* 2: Outlet Manager, 1:User */
        "bitmap":[[integer, .....],.....[integer, .....]] /* array size 8 * 128 */
                                   /* 16PDU * 64Port = 1024bits = 8 * 128 */
    }
}
```

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

```
{ "error":0 }      /* 0:success, 1:error */
```

■ GET

■ Request:

GET <snmp_ip>/api /setting/local_user HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonc
e=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

5.10. Radius User

■ POST

■ Resource URL:

https://<snmp_ip>/api/setting/radius_user

■ Request:

POST <snmp_ip>/api/setting/radius_user HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonc
e=69153d25a8a7a0ae

Accept: application/json

Content-type: application/json

```
{
  "radius_user":{
    "name":"string",
    "privilege":integer,      /* 2: Outlet Manager, 1:User */
    "bitmap":[[integer, .....],.....[integer, .....]] /* array size 8 * 128 */
                                     /* 16PDU * 64Port = 1024bits = 8 * 128 */
  }
}
```

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json
{ "error":0 } /* 0:success, 1:error */

■ GET

■ Request:

GET <snmp_ip>/api /setting/radius_user HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

5.11. LDAP User

■ POST

■ Resource URL:

https://<snmp_ip>/api/setting/ldap_user

■ Request:

POST <snmp_ip>/api/setting/ldap_user HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

Accept: application/json

Content-type: application/json

```
{
  "ldap_user":{
    "name":"string",
    "privilege":integer,      /* 2: Outlet Manager, 1:User */
    "bitmap":[[integer, .....],.....[integer, .....]] /* array size 8 * 128 */
                                     /* 16PDU * 64Port = 1024bits = 8 * 128 */

  }
}
```

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error":0 } /* 0:success, 1:error */

■ GET

■ Request:

GET <snmp_ip>/api /setting/ldap_user HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json
Content-type: application/json

/* refer POST content */

5.12. TACACS+ User

■ POST

■ Resource URL:

https://<snmp_ip>/api/setting/tac_user

■ Request:

POST <snmp_ip>/api/setting/tac_user HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

Accept: application/json

Content-type: application/json

```
{
  "tac_user":{
    "name":"string",
    "privilege":integer,      /* 2: Outlet Manager, 1:User */
    "bitmap":[[integer, .....],.....[integer, .....]] /* array size 8 * 128 */
                                     /* 16PDU * 64Port = 1024bits = 8 * 128 */

  }
}
```

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error":0 } /* 0:success, 1:error */

■ GET

■ Request:

GET <snmp_ip>/api /setting/tac_user HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

- Response:
http/1.1 200 OK
Set-Cookie:
trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800
Accept: application/json
Content-type: application/json

/* refer POST content */

5. Logs

6.1. System Log

Get system log.

- Request URL:
https://<snmp_ip>/api/logs/sys_log
- Request:
GET
<snmp_ip>/api/logs/sys_log?startIdx=integer&displayNum=integer&eventLevel=integer&lang=en_US&time1=dd/mm/yyyy&time2=dd/mm/yyyy HTTP 1.1
Host: localhost
Cookie:
trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;nonce=69153d25a8a7a0ae

Name	Description
startIdx	the offset of log from specific datetime
displayNum	log count, which will be displayed on the web page
eventLevel	2:Information(include Warning and Critical), 1:Warning(include Critical), 0:Critical
lang	en_US, de_DE, es_ES, user_1, user_2
time1	start date (if there is no time1, read from the last log)
time2	end date (time1 and time2 must be paired, otherwise an error will be returned)

- Request:
HTTP/1.1 200 OK
Set-Cookie:
trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800
Accept: application/json
Content-type: application/json
{

"total_count":integer,

```

    "return_count":integer,
    "log_data":[
        {
            "date":"string",          /* data is returned from startIdx */
            "time":"string",
            "log_level":integer,      /* refer eventLevel */
            "description":"string"
        },
        .....
    ]
}

```

6.2. Event Log

Get event log.

■ Request URL:

https://<snmp_ip>/api/logs/evt_log

■ Request:

GET

<snmp_ip>/api/logs/evt_log?startIdx=integer&displayNum=integer&eventLevel=integer&dev=string&lang=en_US&time1=dd/mm/yyyy&time2=dd/mm/yyyy HTTP 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;nonce=69153d25a8a7a0ae

Name	Description
startIdx	the offset of log from specific datetime
displayNum	log count, which will be displayed on the web page
eventLevel	2:Information(include Warning and Critical), 1:Warning(include Critical), 0:Critical
dev	device name
lang	en_US, de_DE, es_ES, user_1, user_2
time1	start date (if there is no time1, read from the last log)
time2	end date (time1 and time2 must be paired, otherwise an error will be returned)

■ Request:

HTTP/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

```

{
    "total_count":integer,

```

```

    "return_count":integer,
    "log_data":[
        {
            "date":"string",          /* data is returned from startIdx */
            "time":"string",
            "log_level":integer,      /* refer eventLevel */
            "description":"string"
        },
        .....
    ]
}

```

6.3. Inlet History Log

Get inlet event log.

■ Request URL:

https://<snmp_ip>/api/logs/inlet_log

■ Request:

GET

<snmp_ip>/api/logs/inlet_log?startIdx=integer&displayNum=integer&eventLevel=integer&dev_idx=integer&lang=en_US&time1=dd/mm/yyyy&time2=dd/mm/yyyy HTTP 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

Name	Description
startIdx	the offset of log from specific datetime
displayNum	log count, which will be displayed on the web page
eventLevel	2:Information(include Warning and Critical), 1:Warning(include Critical), 0:Critical
dev_idx	pdu device index. 0 is master, 1 is salve01 ... 15 is salve15.
lang	en_US, de_DE, es_ES, user_1, user_2
time1	start date (if there is no time1, read from the last log)
time2	end date (time1 and time2 must be paired, otherwise an error will be returned)
drawUi	Draw UI (Option)

■ Request:

HTTP/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{

```

    "total_count":integer,
    "return_count":integer,
    "log_data":[
        {
            "date":"string",          /* data is returned from startIdx */
            "time":"string",
            "pdu":"string",
            "power":integer,
            "power_max":integer,
            "energy":integer,
            "current_ph1_b1":integer,
            "current_ph1_b2":integer,
            "current_ph1":integer,
            "current_ph1_max":integer,
            "current_ph2_b1":integer,
            "current_ph2_b2":integer,
            "current_ph2":integer,
            "current_ph2_max":integer,
            "current_ph3_b1":integer,
            "current_ph3_b2":integer,
            "current_ph3":integer,
            "current_ph3_max":integer,
            "volt_ph1":integer,
            "volt_ph2":integer,
            "volt_ph3":integer,
            "pf_ph1_b1":integer,
            "pf_ph1_b2":integer,
            "pf_ph2_b1":integer,
            "pf_ph2_b2":integer,
            "pf_ph3_b1":integer,
            "pf_ph3_b2":integer,
            "freq_ph1":integer,
            "freq_ph2":integer,
            "freq_ph3":integer,
            "dev_idx":integer          /* When draw UI = 1 */
        },
        .....
    ]
}

```

6.4. Outlet History Log

Get outlet event log.

■ Request URL:

https://<snmp_ip>/api/logs/outlet_log

■ Request:

GET

<snmp_ip>/api/

logs/outlet_log?startIdx=integer&displayNum=integer&eventLevel=integer&dev_idx=integer&olet_dev=integer&lang=en_US&time1=dd/mm/yyyy&time2=dd/mm/yyyy HTTP 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

Name	Description
startIdx	the offset of log from specific datetime
displayNum	log count, which will be displayed on the web page
eventLevel	2:Information(include Warning and Critical), 1:Warning(include Critical), 0:Critical
dev_idx	pdu device index. 0 is master, 1 is salve01 ... 15 is salve15.
olet_idx	outlet index.
lang	en_US, de_DE, es_ES, user_1, user_2
time1	start date (if there is no time1, read from the last log)
time2	end date (time1 and time2 must be paired, otherwise an error will be returned)
drawUi	Draw UI (Option)

■ Request:

HTTP/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{

 "total_count":integer,

 "return_count":integer,

 "log_data":[

 {

 "date":"string", /* data is returned from startIdx */

 "time":"string",

"pdu":"string",

"outlet":"string",

 "power":integer,

 "power_max":integer

 "energy":integer,


```

        "current":integer,
        "pf":integer,
        "freq":integer,
        "dev_idx":integer,      /* When draw UI = 1*/
        "olet_idx":integer     /* When draw UI = 1*/
    },
    .....
]
}

```

6.5. Environment Log

Get inlet event log.

■ Request URL:

https://<snmp_ip>/api/logs/emd_log

■ Request:

GET

<snmp_ip>/api/logs/emd_log?startIdx=integer&displayNum=integer&eventLevel=integer&dev_idx=integer&emd_idx=integer&lang=en_US&time1=dd/mm/yyyy&time2=dd/mm/yyyy HTTP 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

Name	Description
startIdx	the offset of log from specific datetime
displayNum	log count, which will be displayed on the web page
eventLevel	2:Information(include Warning and Critical), 1:Warning(include Critical), 0:Critical
dev_idx	pdu device index. 0 is master, 1 is salve01 ... 15 is salve15. -1 is all
emd_idx	emd device index, 0 is emd-1, ..., 7 is emd-8, -1 is all
lang	en_US, de_DE, es_ES, user_1, user_2
time1	start date (if there is no time1, read from the last log)
time2	end date (time1 and time2 must be paired, otherwise an error will be returned)

■ Request:

HTTP/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

```

{
    "total_count":integer,
    "return_count":integer,

```

```

    "log_data":[
        {
            "date":"string",          /* data is returned from startIdx */
            "time":"string",
            "dev_idx":integer,
            "emd_idx":integer,
            "temp":integer,
            "humi":integer,
        },
        .....
    ]
}

```

6.6. Syslog Setting

■ POST

■ Resource URL:

https://<snmp_ip>/api/logs/syslog_setting

■ Request:

POST <snmp_ip>/api/logs/syslog_setting HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonc
e=69153d25a8a7a0ae

Accept: application/json

Content-type: application/json

```

{
    "syslog_settting":{
        "sys_evt_log":{
            "sys_evt_log_en":integer,    /* 0:Disabled, 1:Enable */
            "ip_address":"string",
            "port":integer
        },
        "his_log":{
            "his_log_en":integer,    /* 0:Disabled, 1:Enable */
            "ip_address":"string",
            "port":integer
        }
    }
}

```

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error":0 } /* 0:success, 1:error */

■ GET

■ Request:

GET <snmp_ip>/api /logs/syslog_setting HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

6.7. Clear and Save Log

6.7.1. Save Log

6.7.2. Save system log.

■ Resource URL:

https://<snmp_ip>/api/logs/save_log/sys_log

■ Request:

GET < snmp_ip>/api/logs/save_log/sys_log?lang=en_US HTTP 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;nonce=69153d25a8a7a0ae

Name	Description
lang	en_US, de_DE, es_ES, user_1, user_2

■ Response:

HTTP/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800
Content-type: text/csv
Content-Disposition: attachment; filename=SystemLog.csv
/* file context */

6.7.3. Save event log.

- Resource URL:

https://<snmp_ip>/api/logs/save_log/evt_log

- Resource URL:

GET < snmp_ip>/api/logs/save_log/evt_log?lang=en_US HTTP 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

Name	Description
lang	en_US, de_DE, es_ES, user_1, user_2

- Response:

HTTP/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Content-type: text/csv

Content-Disposition: attachment; filename=EventLog.csv

/* file context

6.7.4. Save inlet log.

- Resource URL:

https://<snmp_ip>/api/logs/save_log/inlet_log

- Resource URL:

GET < snmp_ip>/api/logs/save_log/inlet_log?lang=en_US HTTP 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

Name	Description
lang	en_US, de_DE, es_ES, user_1, user_2

- Response:

HTTP/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Content-type: text/csv

Content-Disposition: attachment; filename=InletHistoryLog.csv
/* file context

6.7.5. Save outlet log.

- Resource URL:

https://<snmp_ip>/api/logs/save_log/outlet_log

- Resource URL:

GET < snmp_ip>/api/logs/save_log/outlet_log?lang=en_US HTTP 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

Name	Description
lang	en_US, de_DE, es_ES, user_1, user_2

- Response:

HTTP/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Content-type: text/csv

Content-Disposition: attachment; filename=OutletHistoryLog.csv

/* file context

6.7.6. Save emd log.

- Resource URL:

https://<snmp_ip>/api/logs/save_log/emd_log

- Resource URL:

GET < snmp_ip>/api/logs/save_log/emd_log?lang=en_US HTTP 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

Name	Description
lang	en_US, de_DE, es_ES, user_1, user_2

- Response:

HTTP/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Content-type: text/csv

Content-Disposition: attachment; filename=EmdHistoryLog.csv

/* file context

6.7.7. Clear Log

Clear system log, event log and inlet history log and outlet history log and env log.

■ Resource URL:

https://<snmp_ip>/api/logs/delete_log

■ Resource URL:

DELETE < snmp

_ip>/api/logs/delete_log?sys_log=integer&evt_log=integer&inlet_log=integer&outlet_log=integer&emd_log=integer HTTP 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

Name	Description
integer	0:doesn't delete, 1:delete

■ Response:

HTTP/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Content-type: application/json

Accept: application/json

Content-type: application/json

{ "error":integer } /* 0:success, 1:error */

7. Advanced

7.1. Multi-Language

7.1.1. Web and Event string

- POST language #1

- Resource URL:

- https://<snmp_ip>/api/advance/multi_lang/string_conf?lang=1

- Request:

- POST <snmp_ip>/api advance/multi_lang/string_conf?lang=1 HTTP / 1.1

- Host: localhost

- Cookie:

- trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c

- nonce=69153d25a8a7a0ae

- Accept: application/json

- Content-type: application/json

- {
 "lang_config":{
 "usr_1_name":"string",
 "usr_1_enable":integer, /* 0:disabled, 1:enabled */
 "serial":integer
 "timestamp":"string" /* 2020-02-06T03:32:34.519Z */
 },
 "web":{
 "key1":"string",
 "key2":"string",

 },
 "event":{
 "key1":"string",
 "key2":"string",

 }
}

- key1 to keyn in web object will be replaced by Appendix 2. Page String List.

- key1 to keyn in event object will be replaced by id field of langEventList in Appendix 3.

- Response:

- http/1.1 200 OK

- Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800
Accept: application/json
Content-type: application/json
{ "error":0 } /* 0:success, 1:error */

■ POST language #2

■ Resource URL:

https://<snmp_ip>/api/advance/multi_lang/string_conf?lang=2

■ Request:

POST <snmp_ip>/api/advance/multi_lang/string_conf?lang=2 HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

Accept: application/json

Content-type: application/json

```
{
  "lang_config":{
    "usr_2_name":"string",
    "usr_2_enable":integer, /* 0:disabled, 1:enabled */
    "serial":integer
    "timestamp":"string" /* 2020-02-06T03:32:34.519Z */
  },
  "web":{
    "key1":"string",
    "key2":"string",
    .....
  },
  "event":{
    "key1":"string",
    "key2":"string",
    .....
  }
}
```

key1 to keyn in web object will be replaced by Appendix 2. Page String List.

key1 to keyn in event object will be replaced by id field of langEventList in Appendix 3.

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json
{ "error":0 } /* 0:success, 1:error */

■ Get language #2

■ Resource URL:

https://<snmp_ip>/api/advance/multi_lang/string_conf?lang=n

■ Request:

GET <snmp_ip>/api advance/multi_lang/string_conf?lang=n HTTP / 1.1

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

7.1.2. Upload/Download

■ Download language #1

■ Resource URL:

https://<snmp_ip>/api/advance/multi_lang/download?lang=1

■ Request:

GET <snmp_ip>/api advance/multi_lang/download?lang=1 HTTP / 1.1

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/octet-stream

Content-Disposition: attachment; filename=sps_lang1

/* file content */

■ Download language #2

■ Resource URL:

https://<snmp_ip>/api/advance/multi_lang/download?lang=2

■ Request:

GET <snmp_ip>/api advance/multi_lang/download?lang=2 HTTP / 1.1

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/octet-stream

Content-Disposition: attachment; filename=sps_lang2

/* file content */

■ Upload language

■ Resource URL:

https://<snmp_ip>/api/advance/multi_lang/upload

■ Request:

POST <snmp_ip>/api advance/multi_lang/upload HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

Content-Type: multipart/form-data; boundary= -----xxxxxx...

Content-Disposition: form-data; filename=sps_lang

/* file content */

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error":integer } /* 0:success, 1:error */

■ Get upload status

■ Resource URL:

https://<snmp_ip>/api/advance/multi_lang/upload

■ Request:

GET <snmp_ip>/api advance/multi_lang/upload HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "progress":integer } /* the uploading % */

7.2. WiFi Configuration

■ POST

■ Resource URL:

https://<snmp_ip>/api/advance/wifi_conf

■ Request:

POST <snmp_ip>/api/advance/wifi_conf HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c

nonce=69153d25a8a7a0ae

Accept: application/json

Content-type: application/json

```
{
  "manu_setting":{
    "wifi_ctrl":integer,          /* 0:disabled, 1:enabled */
    "wifi_ssid":"string",
    "wifi_psw":"string",         /* refer note 1 */
    "wifi_encryption":integer,    /* 0:none, 1:WEP, 2:WPA-PSK, 3:WPA2-PSK */
    "wifi_security":integer,      /* 0:none, 1:TKIP, 2:AES, 3:TKIP + AES */
    "wifi_set":integer            /* setting index, manual setting is 16 */
  },
  "status":{
    "conn_status":integer,        /* 0:disconnection, 1:Associated, 2:connection
*/
    "ip_addr":"string",
    "net_mask":"string",
    "gw_addr":"string",
    "mac_addr":"string"
  },
  "reconnect":integer
}
```

■ Response:

http/1.1 200 OK

Set-Cookie:

```
trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800
Accept: application/json
Content-type: application/json
{ "error":integer }          /* 0:success, 1:error */
```

■ Get

■ Resource URL:

https://<snmp_ip>/api/advance/wifi_conf

■ Request:

GET <snmp_ip>/api/advance/wifi_conf HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

7.3. SMS Configuration

7.3.1. SMS Setting

■ POST

■ Resource URL:

https://<snmp_ip>/api/advance/sms_conf/setting

■ Request:

POST <snmp_ip>/api/advance/sms_conf/setting HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

Accept: application/json

Content-type: application/json

```
{
    "sms_ctrl":integer,          /* 0:disabled, 1:enabled */
    "sms_auth":integer,         /* 0:disabled, 1:enabled */
    "pin_code":"string",        /* base64(aes-cbc-256(pin_code)) */
}
```

```

    "phone":["string", .....],      /* array size is 16, the order in object, start from 0 */
    "severity":[integer, .....],    /* 0:information, 1:warning, 2:critical */
    "body":["string", .....],      /* prefix body */
    "action":[integer, .....]      /* 0:disabled, 1:enabled */
    "condition":[integer, .....]    /* prefix checkbox, 0:disabled, 1:enabled */
    "filter":[[integer, .....], .....] /* event filter, array size is 8 * 32 */
}

```

condition	bit0:prefix
-----------	-------------

■ Note 1 :

base64(evpc-aes-256-cbc) = base64(EVP-AES-256-CBC(password, key(trackid), iv(cnonce)))

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error":integer } /* 0:success, 1:error */

■ Get

■ Resource URL:

https://<snmp_ip>/api/advance/sms_conf/setting

■ Request:

GET <snmp_ip>/api advance/sms_conf/setting HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

7.3.2. SMS Test

■ POST

■ Resource URL:

https://<snmp_ip>/api/advance/sms_conf/test

■ Request:

POST <snmp_ip>/api advance/sms_conf/test HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c

nonce=69153d25a8a7a0ae

Accept: application/json

Content-type: application/json

```
{  
    "sned":integer    /*0:nothing, 1~16: send test trap index (0 ~ 15). */  
}
```

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

```
{ "error":integer }    /* 0:success, 1:error */
```

3. External Link

Get external link.

■ Resource URL:

https://<snmp_ip>/api/external_link

■ Request:

GET <sps_ip>/api/external_link HTTP 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

■ Response:

HTTP/1.1 200 OK

Set-Cookie: trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

```
{
  "screen_text":["string",.....],          /* array size is 4 */
  "link_addr":["string", .....],
  "status":[integer, .....]               /* 0:hide, 1:show */
}
```

9. Manufacture

9.1. Manufacture Setting

■ POST

■ Resource URL:

https://<snmp_ip>/api/manufacture/setting

■ Request:

POST <snmp_ip>/api/manufacture /setting HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonc
e=69153d25a8a7a0ae

Accept: application/json

Content-type: application/json

```
{
  "setting":{
    "hw_type":"string",
    "pdu_type":"string",    /* PDU or ATS */
    "web_link":"string",
    "sys_name":"string",
    "sys_contact":"string",
    "lcm_type":"string",    /* STN or OLED */
    "reload_logo":integer,  /* 0:nothing, 1: previous logo */
    "upload_logo": { /* refer section 9.1.1 */ },
    "serial_num":"string",
    "outlet_grp_act":integer,
    "rly_sw":{
      "clr_rly_sw_cnt":integer,
    },
    "sckt_head":integer,    /* only for STIHL */
    "sckt_tail":integer,    /* only for STIHL */
    "sckt_num_flag":integer, /* only for STIHL */
    "rcm_type":integer      /* 1: RCMB121-2 (AC Type), 0: RCMB121-1 (DC Type)
*/
```

```
}
```

```
}
```

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error":0 } /* 0:success, 1:error */

■ GET

■ Request:

GET <snmp_ip>/api /manufacture/setting HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

/* refer POST content */

9.1.1. Upload the logo

■ POST

■ Request:

POST <snmp_ip>/api/manufacture/setting/upload_logo HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;nonce=69153d25a8a7a0ae

Content-Type: multipart/form-data; boundary=-----xxxxxx...

Content-Disposition: form-data; filename=logo.png

/* file content */

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error":0 }

■ GET

■ Request:

GET <snmp_ip>/api/manufacture/setting/upload_logo HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "logo_check":integer } /* 0: progress, 1: success, > 50: fail */

9.2. Inlet & Outlet Upgrade

9.2.1. Upload inlet/outlet firmware

■ POST

■ Request:

POST <snmp_ip>/api/manufacture/fw_dev/upload HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

Content-Type: multipart/form-data; boundary=-----xxxxxx...

Content-Disposition: form-data; filename=fw.485

/* file content */

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

{ "error":0 }

■ GET

■ Request:

GET <snmp_ip>/api/manufacture/fw_dev/upload HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

- Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

```
{
    "upload_progress":integer,          /* the uploading % */
    "img_size":integer,
    "img_type":[integer, .....],
    "img_ver":[integer, .....],
    "precent":[integer, .....],
    "status":[integer, .....],
    "ver":[integer, .....],
    "addr":[integer, .....],
    "type":[integer, .....]
}
```

9.3. EMD Upgrade

9.3.1. Upload emd firmware

- POST
 - Request:

POST <snmp_ip>/api/manufacture/fw_emd/upload_fw HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;cnonce=69153d25a8a7a0ae

Content-Type: multipart/form-data; boundary=-----xxxxxx...

Content-Disposition: form-data; filename=fw.485

/* file content */
 - Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

```
{ "error":0 }
```
- GET
 - Request:

GET <snmp_ip>/api/manufacture/fw_emd/upload HTTP / 1.1

Host: localhost

Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

■ Response:

http/1.1 200 OK

Set-Cookie:

trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

Accept: application/json

Content-type: application/json

```
{  
  "upload_progress":integer,          /* the uploading % */  
  "upload_version":"string",  
  "update_percent":[integer,.....],  
  "update_ver":["string",.....],  
  "update_addr":[integer,.....],  
  "update_type":[integer,.....],  
  "update_status":[integer, .....]  
}
```

10. Web Information

10.1. Web Information

- GET

- Request:

- GET <snmp_ip>/api/web_info HTTP / 1.1

- Host: localhost

- Cookie:

- trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;nc=00000002;c
nonce=69153d25a8a7a0ae

- Response:

- http/1.1 200 OK

- Set-Cookie:

- trackid=ddc8369e9c91ae4dfba1d51441588a1d;uid=7a0aedfba1d514c9;Max-Age=1800

- Accept: application/json

- Content-type: application/json

- {
 "web_refersh_interval":integer,
 "web_timeout_en":integer,
 "web_timeout_interval":integer
}

Appendix 1. Resource Mapping

TBD

Appendix 2. Page String List

TBD

Appendix 3. Event String List

TBD

History:

Date	Version	Description
12/16/2020	1.0	First record.
12/16/2020	1.1	Delete "lt_close" & "set_lt_close" of EMD. Add temperature & humidity hysteresis description of EMD. Modify the length of the outlet bitmap from 8 * 64 to 16 * 64.
12/21/2020	1.2	Modify one schedule date format (string -> integer). Add a field for the week schedule date.
12/22/2020	1.3	Modify local/radius user privilege define. Add "inlet total energy clear" Modify inlet & outlet log parameter name, (dev_idx, olet_idx)
12/29/2020	1.4	Add MFG function.
01/05/2021	1.5	Modify EMD log filter field. (dev_idx, emd_idx). Add firmware version of inlet & outlet.
01/13/2021	1.6	Add Web information. Modify one schedule date format. Modify unit value of voltage current PF.
01/25/2021	1.7	Modify the definition of event level description. Modify energy unit.
02/09/2021	1.8	Modify the RCM current description.
03/09/2021	1.9	Modify send test mail. Add mail type & mail event level comment. Add send test mail/trap/sms index field.
04/16/2021	2.0	Modify temperature and humidity calibration to define EMD index. (position) Modify outlet on/off delay description. (position) Modify the security interval and time field mapping definition. (position) Modify the RCM current unit. (position)
05/05/2021	2.1	Modify the Dual Ethernet setting range. (position) Add priority field of accessible IP. (position) Modify the IPv6 config range. (position)
	2.2	Modify action define of accessible IP. (position) Add daisy chain status of User Privilege. (position) Add non-meter of Outlet BID. (position)
06/01/2021	2.3	Add daisy chain slave. Add Send Test Mail function.
12/30/2021	2.4	Add daisy chain mode of User Privilege. Add snmp vaid and master enable of Device Monitoring. Add power src, charge error, rcm bit of Inlet. Add relay count, charge state of Outlet.

		Add location name of EMD. Add alarm index of Alarm List. Add power factor threshold and some charge setting of Inlet Management. Add LDAP and TACACS+ schedule setting of Schedule. Add LDAP and TACACS+ group setting of Group. Add LDAP and TACACS+ user setting of Network Service. Add sync mode of System Configuration. Add admin password check and change of Authentication Configuration. Add IEC server guid of IEC View Management. Add SNMP Firmware Update function. Add LDAP User function. Add TACACS+ User function. Add upload logo, serial name, outlet group action, clear relay count, rcmb type and some charge setting of Manufacture Setting.
01/06/2023	2.5	Modify Device Monitoring POST to GET.
01/08/2023	2.6	Add sequential flag of outlet monitoring and management.
04/06/2023	2.7	Modify SNMP v3 array size 1 to 8.