



Power Distribution Unit

3PH PDU

REST API Manual

1. Login

- **Step 1:** This step involves sending a POST request with login credentials to obtain a temporary token, which is then used to verify the login status and authorize subsequent requests.

```
curl -X POST http://<IP>/api/login/ -d  
'{"username":"<Account>","passwd":"<Password>"}
```

```
{  
  "temp_token": "B76B244D6AE88A0B377960F",  
  "status_check_method": "GET",  
  "status_check_url": "/api/login/status",  
  "authorization_header": "Authorization: Bearer <temp_token>"  
}
```

- **Step 2:** This step verifies the user's login status by sending a GET request with the Authorization header, which contains the **<temp_token>** obtained in Step 1.

```
curl -v http://<IP>/api/login/status/ -H "Authorization: Bearer  
<temp_token>"
```

```
{  
  "result": "success",  
  "token": "B498373EDB82A5F76772CF10B37070176708BD7D6694036E6C561DAB965D259B",  
  "expires_in": 180  
}
```

Example for POSTMAN

- Step 1:

The screenshot shows a Postman interface for a POST request to `http://<ip>/api/login/`. The request body is a JSON object: `{ "username": "admin", "passwd": "admin" }`. The response is a 200 OK with a 907 ms response time and 312 B of data. The response body is a JSON object: `{ "temp_token": "DF87C6580F2CBC74E8DE0F11", "status_check_method": "GET", "status_check_url": "/api/login/status", "authorization_header": "Authorization: Bearer <temp_token>" }`.

- Step 2:

The screenshot shows a Postman interface for a GET request to `http://<ip>/api/login/status/`. The request is authorized with a Bearer Token: `DF87C6580F2CBC74E8DE0F11`. The response is a 200 OK with a 59 ms response time and 256 B of data. The response body is a JSON object: `{ "result": "success", "token": "7B491706FC6FFE0E609A65FFB8A40998B836D04C284A5B5D845D17047B4D57A11", "expires_in": 180 }`.

2. Logout

```
curl -X PUT http://<IP>/api/logout/ -d '{"logout":"true"}' -H "Authorization: Bearer <token>"
```

3. General

curl -v http://<IP>/api/general/ -H "Authorization: Bearer <token>"

```
curl -v http://192.168.202.68/api/general/ -H "Authorization: Bearer B498373EDB82A5F76772CF10B37070176708BD7D6694036E6C561DAB965D259B"
```

```
{
  "datetime": {
    "date": "07/24/2025",
    "time": "01:02:59",
    "timezone": "GMT +0000",
    "ntp_use": "false",
    "ntp_pri_server": "0.0.0.0",
    "ntp_sec_server": "0.0.0.0",
    "dst": "none",
    "date_format": "mm/dd/yyyy"
  },
  "ident": {
    "name": "PDU81001",
    "location": "Server Room",
    "contact": "Administrator"
  }
}
```

- show datetime

curl -v http://<IP>/api/general/datetime/ -H "Authorization: Bearer <token>"

```
{
  "date": "07/24/2025",
  "time": "03:05:53",
  "timezone": "GMT +0000",
  "ntp_use": "false",
  "ntp_pri_server": "0.0.0.0",
  "ntp_sec_server": "0.0.0.0",
  "dst": "none",
  "date_format": "mm/dd/yyyy"
}
```

- show date

curl -v http://<IP>/api/general/datetime/date/ -H "Authorization: Bearer <token>"

- set date

curl -X PUT http://<IP>/api/general/datetime/date/ -H "Authorization: Bearer <token>" -d '{"date": "mm/dd/yyyy"}'
Ex : {"date": "11/30/2023"}

- show time

curl -v http://<IP>/api/general/datetime/time/ -H "Authorization: Bearer <token>"

- set time

```
curl -X PUT http://<IP>/api/general/datetime/time/ -H
"Authorization: Bearer <token>" -d '{"time":"hh:mm:ss"}'
Ex : {"time":"14:32:45"}
```

- **show timezone**

```
curl -v http://<IP>/api/general/datetime/timezone/ -H
"Authorization: Bearer <token>"
```

- **set timezone**

```
curl -X PUT http://<IP>/api/general/datetime/timezone/ -H
"Authorization: Bearer <token>" -d '{"timezone":"<Timezone>"}'
Ex : {"timezone": "GMT +0000"}
```

- **show ntp use**

```
curl -v http://<IP>/api/general/datetime/ntp_use/ -H "Authorization:
Bearer <token>"
```

- **set ntp use**

```
curl -X PUT http://<IP>/api/general/datetime/ntp_use/ -H
"Authorization: Bearer <token>" -d '{"ntp_use":"<true/false>"}'
Ex : {"ntp_use":"true"}
```

- **show ntp primary server**

```
curl -v http://<IP>/api/general/datetime/ntp_pri_server/ -H "
Authorization: Bearer <token>"
```

- **set ntp primary server**

```
curl -X PUT http://<IP>/api/general/datetime/ntp_pri_server/ -H
"Authorization: Bearer <token>" -d '{"ntp_pri_server":"<NTP
Server>"}'
Ex : {"ntp_pri_server":"TIME1.google.com"}
```

- **show ntp secondary server**

```
curl -v http://<IP>/api/general/datetime/ntp_sec_server/ -H
"Authorization: Bearer <token>"
```

- **set ntp secondary server**

```
curl -X PUT http://<IP>/api/general/datetime/ntp_sec_server/ -H
```

"Authorization: Bearer <token>" -d '{"ntp_sec_server": "<NTP Server>"}'

Ex : {"ntp_sec_server": "TIME1.google.com"}

- **show dst**

curl -v http://<IP>/api/general/datetime/dst/ -H "Authorization: Bearer <token>"

- **set dst**

curl -X PUT http://<IP>/api/general/datetime/dst/ -H "Authorization: Bearer <token>" -d '{"dst": "<none/tradition/manual>"}'

Ex : {"dst": "none"}

- **show date_format**

curl -v http://<IP>/api/general/datetime/date_format/ -H "Authorization: Bearer <token>"

- **set date_format**

curl -X PUT http://<IP>/api/general/datetime/date_format/ -H "Authorization: Bearer <token>" -d '{"date_format": "<Date Format>"}'

Ex : {"date_format": "yyyy/mm/dd"}

⇒ "date_format" → "mm/dd/yyyy" 、 "yyyy/mm/dd" 、 "dd.mm.yyyy" 、 "mmm-dd-yy" 、 "dd-mmm-yy" 、 "yyyy-mm-dd"

- **set date and time**

curl -X PUT http://<IP>/api/general/datetime/ -H "Authorization: Bearer <token>" -d '{"date": "mm/dd/yyyy", "time": "hh:mm:ss"}'

Ex : {"date": "11/30/2023", "time": "15:56:21"}

- **show ident**

curl -v http://<IP>/api/general/ident/ -H "Authorization: Bearer <token>"

```
{
  "name": "PDU81001",
  "location": "Server Room",
  "contact": "Administrator"
}
```

- **show identification name**

```
curl -v http://<IP>/api/general/ident/name/ -H "Authorization: Bearer <token>"
```

- **set identification name**

```
curl -X PUT http://<IP>/api/general/ident/name/ -H "Authorization: Bearer <token>" -d '{"name": "<NAME>"}
```

Ex : {"name": "test_name"}

- **show identification location**

```
curl -v http://<IP>/api/general/ident/location/ -H "Authorization: Bearer <token>"
```

- **set identification location**

```
curl -X PUT http://<IP>/api/general/ident/location/ -H "Authorization: Bearer <token>" -d '{"location": "<Location>"}
```

Ex : {"location": "test_location"}

- **show identification contact**

```
curl -v http://<IP>/api/general/ident/contact/ -H "Authorization: Bearer <token>"
```

- **set identification contact**

```
curl -X PUT http://<IP>/api/general/ident/contact/ -H "Authorization: Bearer <token>" -d '{"contact": "<Contact>"}
```

Ex : {"contact": "test_contact"}

- **set identification name, location and contact**

```
curl -X PUT http://<IP>/api/general/ident/ -H "Authorization: Bearer <token>" -d
```

```
'{"name": "test_name", "location": "test_location", "contact": "test"}
```

4. Security

curl -v http://<IP>/api/security/ -H "Authorization: Bearer <token>"

```
{
  "management": {
    "authtype": "localonly",
    "secret": "powerpanel.encryption.key",
    "mgrip": {
      "admin": [
        {
          "ip": "0.0.0.0",
          "access": "true"
        },
        {
          "ip": "0.0.0.0",
          "access": "false"
        }
      ],
      "viewer": [
        {
          "ip": "0.0.0.0",
          "access": "true"
        },
        {
          "ip": "0.0.0.0",
          "access": "false"
        }
      ]
    }
  },
  "local": {
    "admin": {
      "username": "admin",
      "passwd": "*****",
      "outlets": "all"
    },
    "outletuser": {
      "num": 0,
      "user": []
    },
    "viewer": {
      "access": "false",
      "username": "device",
      "passwd": "*****",
      "outlets": "none"
    }
  },
  "radius": {
    "num": 0,
    "server": []
  },
  "ldap": {
    "num": 0,
    "server": []
  },
  "session": {
    "timeout": 20
  }
}
```

- show authtype of system

curl -v http://<IP>/api/security/management/authtype/ -H
"Authorization: Bearer <token>"

- set authtype of system

curl -X PUT http://<IP>/api/security/management/authtype/ -H

"Authorization: Bearer <token>" -d '{"authtype":"<Auth Type>"}

Ex : {" authtype ":" localonly"}

⇒ "authtype" → "localonly" 、 "radiusonly" 、 "radiuslocal" 、 "ldaponly" 、 "ldaplocal"

- **show secret of software authentication**

curl -v http://<IP>/api/security/management/secret/ -H

"Authorization: Bearer <token>"

- **set secret of software authentication**

curl -X PUT http://<IP>/api/security/management/secret/ -H

"Authorization: Bearer <token>" -d '{"secret":"<PPB Secret Phase>"}

- **show manager IP**

curl -v http://<IP>/api/security/management/mgrip/ -H

"Authorization: Bearer <token>"

```
{
  "admin": [
    {
      "ip": "0.0.0.0",
      "access": "true"
    },
    {
      "ip": "0.0.0.0",
      "access": "false"
    }
  ],
  "viewer": [
    {
      "ip": "0.0.0.0",
      "access": "true"
    },
    {
      "ip": "0.0.0.0",
      "access": "false"
    }
  ]
}
```

- **show admin first manager IP**

curl -v http://<IP>/api/security/management/mgrip/admin/1/ -H

"Authorization: Bearer <token>"

- **show admin secondary manager IP**

curl -v http://<IP>/api/security/management/mgrip/admin/2/ -H

"Authorization: Bearer <token>"

```
{
  "ip": "0.0.0.0",
  "access": "true"
}
```

- **set admin secondary manager IP**

```
curl -X PUT http://<IP>/api/security/management/mgrip/admin/2/ -H  
"Authorization: Bearer <token>" -d  
'{"ip":"192.168.202.44","access":"true"}
```

- **set admin manager IP by array**

```
curl -X PUT http://<IP>/api/security/management/mgrip/admin/ -H  
"Authorization: Bearer <token>" -d  
'{"mgrip":[{"ip":"192.168.202.11"}, {"ip":"192.168.202.44"}, {"access":"true"}]}
```

(Set admin primary manager IP as 192.168.202.11 › Set admin secondary manager IP as 192.168.202.44)

- **show viewer first manager IP**

```
curl -v http://<IP>/api/security/management/mgrip/viewer/1/ -H  
"Authorization: Bearer <token>"
```

- **show viewer secondary manager IP**

```
curl -v http://<IP>/api/security/management/mgrip/viewer/2/ -H  
"Authorization: Bearer <token>"
```

```
{  
  "ip": "0.0.0.0",  
  "access": "true"  
}
```

- **set viewer secondary manager IP**

```
curl -X PUT http://<IP>/api/security/management/mgrip/viewer/2/ -H  
"Authorization: Bearer <token>" -d  
'{"ip":"192.168.202.44","access":"true"}
```

- **set viewer manager IP by array**

```
curl -X PUT http://<IP>/api/security/management/mgrip/viewer/ -H  
"Authorization: Bearer <token>" -d  
'{"mgrip":[{"ip":"192.168.202.11"}, {"ip":"192.168.202.44"}, {"access":"true"}]}
```

(Set viewer primary manager IP as 192.168.202.11 › Set viewer secondary manager IP as 192.168.202.44)

- **show Local Account**

curl -v http://<IP>/api/security/local/ -H "Authorization: Bearer <token>"

```
{
  "admin": {
    "username": "admin",
    "passwd": "*****",
    "outlets": "all"
  },
  "outletuser": {
    "num": 1,
    "user": [
      {
        "index": 1,
        "access": "true",
        "username": "outlet_user_new",
        "passwd": "*****",
        "outlets": "1,2,3,4"
      }
    ]
  },
  "viewer": {
    "access": "false",
    "username": "device",
    "passwd": "*****",
    "outlets": "none"
  }
}
```

- **show Admin Account**

curl -v http://<IP>/api/security/local/admin/ -H "Authorization: Bearer <token>"

```
{
  "username": "admin",
  "passwd": "*****",
  "outlets": "all"
}
```

- **set admin account**

curl -X PUT http://<IP>/api/security/local/admin/ -H "Authorization: Bearer <token>" -d '{"username": "admin", "curpasswd": "admin", "passwd": "123"}'

- **show outlet user account**

curl -v http://<IP>/api/security/local/outletuser/ -H "Authorization: Bearer <token>"

```
{
  "num": 1,
  "user": [
    {
      "index": 1,
      "access": "true",
      "username": "outlet_user_new",
      "passwd": "*****",
      "outlets": "1,2,3,4"
    }
  ]
}
```

- show the number of outlet user account

```
curl -v http://<IP>/api/security/local/outletuser/num/ -H  
"Authorization: Bearer <token>"
```

- show first outlet user account

```
curl -v http://<IP>/api/security/local/outletuser/user/1/ -H  
"Authorization: Bearer <token>"
```

```
{  
  "index": 1,  
  "access": "true",  
  "username": "outlet_user_new",  
  "passwd": "*****",  
  "outlets": "1,2,3,4"  
}
```

- add outlet user account

```
curl -X POST http://<IP>/api/security/local/outletuser/user/ -H  
"Authorization: Bearer <token>" -d '{"access": "true","username":  
"outlet_user_new","passwd": "cyber","outlets":"1,2,3,4;g#1-1,2;"}'  
(Add new outlet user access as true, name as outletuser_new, password as cyber  
and authorized outlet as outlet 1,2,3,4 and guest1 outlet 1,2)
```

- set first outlet user account

```
curl -X PUT http://<IP>/api/security/local/outletuser/user/1/ -H  
"Authorization: Bearer <token>" -d '{"access": "false","username":  
"outletuser_1","passwd": "cyber"}'
```

- delete first outlet user account

```
curl -X DELETE http://<IP>/api/security/local/outletuser/user/ -d  
'{"index":1}' -H "Authorization: Bearer <token>"
```

- show viewer account

```
curl -v http://<IP>/api/security/local/viewer/ -H "Authorization:  
Bearer <token>"
```

```
{  
  "access": "false",  
  "username": "device",  
  "passwd": "*****",  
  "outlets": "none"  
}
```

- set viewer account

```
curl -X PUT http://<IP>/api/security/local/viewer/ -H "Authorization:  
Bearer <token>" -d '{"access": "false","username":
```

```
"device","passwd": "cyber"}
```

- **show radius server**

```
curl -v http://<IP>/api/security/radius/ -H "Authorization: Bearer <token>"
```

```
{
  "num": 1,
  "server": [
    {
      "hostname": "1.1.1.1",
      "secret": "*****",
      "port": 456,
      "authtype": "pap",
      "timeout": 20
    }
  ]
}
```

- **show the number of radius server**

```
curl -v http://<IP>/api/security/radius/num/ -H "Authorization: Bearer <token>"
```

- **show primary radius server**

```
curl -v http://<IP>/api/security/radius/server/1/ -H "Authorization: Bearer <token>"
```

```
{
  "hostname": "1.1.1.1",
  "secret": "*****",
  "port": 456,
  "authtype": "pap",
  "timeout": 20
}
```

- **add radius server**

```
curl -X POST http://<IP>/api/security/radius/server/ -H "Authorization: Bearer <token>" -d '{"hostname": "1.1.1.1","secret": "cybertest111","port": 456,"authtype": "pap","timeout": 20}'
```

⇒ "hostname" → <STRING>

⇒ "port" → <NUMBER>

⇒ "secret" → <STRING>

⇒ "authtype" → "pap" 、 "chap"

- **set primary radius server hostname**

```
curl -X PUT http://<IP>/api/security/radius/server/1/ -H "Authorization: Bearer <token>" -d '{"hostname": "1.1.1.1","secret": "cybertest111","port": 456,"authtype": "pap","timeout": 20}'
```

- delete primary radius server

```
curl -X DELETE http://<IP>/api/security/radius/server/ -d '{"index":1}'  
-H "Authorization: Bearer <token>"
```

- show ldap server

```
curl -v http://<IP>/api/security/ldap/ -H "Authorization: Bearer  
<token>"
```

```
{  
  "num": 1,  
  "server": [  
    {  
      "hostname": "1.1.1.1",  
      "ssl": "false",  
      "port": 389,  
      "basedn": "dc=cyber,dc=com",  
      "userattr": "cn",  
      "auth_n_mode": "anonymous",  
      "accrdn": "",  
      "accrpw": "",  
      "auth_z_mode": "byattr",  
      "adminattr": "description",  
      "adminvalue": "cyber_admin",  
      "outletuservalue": "cyber_outletuser",  
      "groupbase": "",  
      "groupattr": "",  
      "groupvalue": "",  
      "type": "generic",  
      "addomain": ""  
    }  
  ]  
}
```

- show the number of ldap server

```
curl -v http://<IP>/api/security/ldap/num/ -H "Authorization: Bearer  
<token>"
```

- show primary ldap server

```
curl -v http://<IP>/api/security/ldap/server/1/ -H "Authorization:  
Bearer <token>"
```

```
{  
  "hostname": "1.1.1.1",  
  "ssl": "false",  
  "port": 389,  
  "basedn": "dc=cyber,dc=com",  
  "userattr": "cn",  
  "auth_n_mode": "anonymous",  
  "accrdn": "",  
  "accrpw": "",  
  "auth_z_mode": "byattr",  
  "adminattr": "description",  
  "adminvalue": "cyber_admin",  
  "outletuservalue": "cyber_outletuser",  
  "groupbase": "",  
  "groupattr": "",  
  "groupvalue": "",  
  "type": "generic",  
  "addomain": ""  
}
```

- **add ldap server**

```
curl -X POST http://<IP>/api/security/ldap/server/ -H "Authorization: Bearer <token>" -d '{"hostname": "1.1.1.1", "ssl": "false", "port": 389, "basedn": "dc=cyber,dc=com", "userattr": "cn", "auth_n_mode": "anonymous", "auth_z_mode": "byattr", "adminattr": "description", "adminvalue": "cyber_admin", "outletuservalue": "cyber_outletuser", "type": "generic"}'
```

- ⇒ "type" → "generic" 、 "ad"
- ⇒ "hostname" → <STRING>
- ⇒ "basedn" → <STRING>
- ⇒ "userattr" → <STRING>
- ⇒ "port" → <NUMBER>
- ⇒ "ssl" → "true" 、 "false"
- ⇒ "auth_n_mode" → "anonymous" 、 "user" 、 "logon"
- ⇒ "addomain" → <STRING>
- ⇒ "accrdn" → <STRING>
- ⇒ "accrpw" → <STRING>
- ⇒ "auth_z_mode" → "byattr" 、 "bygroup"
- ⇒ "adminattr" → <STRING>
- ⇒ "adminvalue" → <STRING>
- ⇒ "outletuservalue" → <STRING>
- ⇒ "groupbase" → <STRING>
- ⇒ "groupattr" → <STRING>
- ⇒ "groupvalue" → <STRING>
- ⇒ "type" → "generic" 、 "ad"

- **set primary ldap server SSL as true**

```
curl -X PUT http://<IP>/api/security/ldap/server/1/ -H "Authorization: Bearer <token>" -d '{"ssl": "true"}'
```

- **set primary ldap server userattr as uid**

```
curl -X PUT http://<IP>/api/security/ldap/server/1/ -H "Authorization: Bearer <token>" -d '{"userattr": "uid"}'
```

- **delete primary ldap server**

```
curl -X DELETE http://<IP>/api/security/ldap/server/ -H "Authorization: Bearer <token>" -d '{"index": 1}'
```

- **show information of session**

```
curl -v http://<IP>/api/security/session/ -H "Authorization: Bearer <token>"
```

```
{  
  "timeout": 3  
}
```

- **set session timeout**

```
curl -X PUT http://<IP>/api/security/session/ -H "Authorization: Bearer <token>" -d '{"timeout":5}'
```

5. Network

curl -v http://<IP>/api/network/ -H "Authorization: Bearer <token>"

```
{
  "ipv4": {
    "ip": "192.168.202.65",
    "subnetmask": "255.255.255.0",
    "gateway": "192.168.202.254",
    "dns": "192.168.20.125",
    "dhcp": "true",
    "dnsfromdhcp": "true",
    "hostname": "pdu111111",
    "hostnamesync": "false"
  },
  "ipv6": {
    "access": "true",
    "routercontrol": "",
    "manual": "false",
    "linklocal": "FE80::20C:15FF:FE11:1111",
    "manualaddr": "",
    "sysmanualaddr": ":",
  },
}
```

```
"snmpv1": {
  "access": "true",
  "user": [
    {
      "community": "public",
      "ip": "0.0.0.0",
      "accesstype": "read-only"
    },
    {
      "community": "private",
      "ip": "0.0.0.0",
      "accesstype": "read-write"
    },
    {
      "community": "public2",
      "ip": "0.0.0.0",
      "accesstype": "forbidden"
    },
    {
      "community": "public3",
      "ip": "0.0.0.0",
      "accesstype": "forbidden"
    }
  ]
}
```

```
"snmpv3": {
  "access": "true",
  "user": [
    {
      "name": "cyber snmpv3 user1",
      "status": "enable",
      "authprotocol": "none",
      "authpasswd": "",
      "privprotocol": "none",
      "privpasswd": "",
      "ip": "0.0.0.0"
    },
    {
      "name": "cyber snmpv3 user2",
      "status": "disable",
      "authprotocol": "none",
      "authpasswd": "",
      "privprotocol": "none",
      "privpasswd": "",
      "ip": "0.0.0.0"
    },
    {
      "name": "cyber snmpv3 user3",
      "status": "disable",
      "authprotocol": "none",
      "authpasswd": "",
      "privprotocol": "none",
      "privpasswd": "",
      "ip": "0.0.0.0"
    },
    {
      "name": "cyber snmpv3 user4",
      "status": "disable",
      "authprotocol": "none",
      "authpasswd": "",
      "privprotocol": "none",
      "privpasswd": "",
      "ip": "0.0.0.0"
    }
  ]
}
```

```
"web": {
  "access": "http",
  "httpport": 80,
  "httpsport": 443,
  "alg": [
    {
      "name": "TLS_DHE_RSA_WITH_AES_256_CBC_SHA",
      "status": "true"
    },
    {
      "name": "TLS_DHE_RSA_WITH_CAMELLIA_256_CBC_SHA",
      "status": "true"
    },
    {
      "name": "TLS_RSA_WITH_AES_256_CBC_SHA",
      "status": "true"
    },
    {
      "name": "TLS_RSA_WITH_CAMELLIA_256_CBC_SHA",
      "status": "true"
    },
    {
      "name": "TLS_RSA_WITH_AES_128_CBC_SHA",
      "status": "true"
    },
    {
      "name": "TLS_RSA_WITH_CAMELLIA_128_CBC_SHA",
      "status": "true"
    },
    {
      "name": "TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256",
      "status": "true"
    },
    {
      "name": "TLS_DHE_RSA_WITH_AES_128_CBC_SHA",
      "status": "true"
    },
    {
      "name": "TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384",
      "status": "true"
    },
    {
      "name": "TLS_DHE_RSA_WITH_CAMELLIA_128_CBC_SHA",
      "status": "true"
    },
    {
      "name": "TLS_DHE_RSA_WITH_AES_256_GCM_SHA384",
      "status": "true"
    },
    {
      "name": "TLS_RSA_WITH_AES_256_CBC_SHA256",
      "status": "true"
    },
    {
      "name": "TLS_RSA_WITH_AES_128_CBC_SHA256",
      "status": "true"
    }
  ]
},
"console": {
  "access": "ssh",
  "telnetport": 23,
  "sshport": 22
},
"ftp": {
  "ftpaccess": "true",
  "ftpport": 21
}
}
```

- show IPv4 configuration

```
curl -v http://<IP>/api/network/ipv4/ -H "Authorization: Bearer <token>"
```

```
{
  "ip": "192.168.202.65",
  "subnetmask": "255.255.255.0",
  "gateway": "192.168.202.254",
  "dns": "192.168.20.125",
  "dhcp": "true",
  "dnsfromdhcp": "true",
  "hostname": "pdul11111",
  "hostnamesync": "false"
}
```

- **show IPv4 IP Address**

curl -v http://<IP>/api/network/ipv4/ip/ -H "Authorization: Bearer <token>"

- **show IPv4 DHCP**

curl -v http://<IP>/api/network/ipv4/dhcp/ -H "Authorization: Bearer <token>"

- **set IPv4 dhcp enable**

curl -X PUT http://<IP>/api/network/ipv4/ -H "Authorization: Bearer <token>" -d '{"access":"true"}'

- **show IPv6 configuration**

curl -v http://<IP>/api/network/ipv6/ -H "Authorization: Bearer <token>"

```
{
  "access": "true",
  "routercontrol": "",
  "manual": "false",
  "linklocal": "FE80::20C:15FF:FE11:1111",
  "manualaddr": "",
  "sysmanualaddr": ":"
}
```

- **show IPv6 IP Address**

curl -v http://<IP>/api/network/ipv6/linklocal/ -H "Authorization: Bearer <token>"

- **set IPv6 access**

curl -X PUT http://<IP>/api/network/ipv6/ -H "Authorization: Bearer <token>" -d '{"access":"true"}'

- **show SNMPv1 information**

curl -v http://<IP>/api/network/snmpv1/ -H "Authorization: Bearer <token>"

```

{
  "access": "true",
  "user": [
    {
      "community": "public",
      "ip": "0.0.0.0",
      "accesstype": "read-only"
    },
    {
      "community": "private",
      "ip": "0.0.0.0",
      "accesstype": "read-write"
    },
    {
      "community": "public2",
      "ip": "0.0.0.0",
      "accesstype": "forbidden"
    },
    {
      "community": "public3",
      "ip": "0.0.0.0",
      "accesstype": "forbidden"
    }
  ]
}

```

- show SNMPv1 secondary user information

curl -v http://<IP>/api/network/snmpv1/user/2/ -H "Authorization: Bearer <token>"

```

{
  "community": "private",
  "ip": "0.0.0.0",
  "accesstype": "read-write"
}

```

- enable SNMPv1 access

curl -X PUT http://<IP>/api/network/snmpv1/ -H "Authorization: Bearer <token>" -d '{"access": "true"}'

- set SNMPv1 secondary user IP as 192.168.0.201.

curl -X PUT http://<IP>/api/network/snmpv1/user/2/ -H "Authorization: Bearer <token>" -d '{"ip": "192.168.0.201"}'

⇒ "community" → <String>

⇒ "ip" → <String>

⇒ "accesstype" → "read-only" 、 "read-write" 、 "forbidden"

- show SNMPv3 information

curl -v http://<IP>/api/network/snmpv3/ -H "Authorization: Bearer <token>"

```
{
  "access": "true",
  "user": [
    {
      "name": "cyber snmpv3 user1",
      "status": "enable",
      "authprotocol": "none",
      "authpasswd": "",
      "privprotocol": "none",
      "privpasswd": "",
      "ip": "0.0.0.0"
    },
    {
      "name": "cyber snmpv3 user2",
      "status": "disable",
      "authprotocol": "none",
      "authpasswd": "",
      "privprotocol": "none",
      "privpasswd": "",
      "ip": "0.0.0.0"
    },
    {
      "name": "cyber snmpv3 user3",
      "status": "disable",
      "authprotocol": "none",
      "authpasswd": "",
      "privprotocol": "none",
      "privpasswd": "",
      "ip": "0.0.0.0"
    },
    {
      "name": "cyber snmpv3 user4",
      "status": "disable",
      "authprotocol": "none",
      "authpasswd": "",
      "privprotocol": "none",
      "privpasswd": "",
      "ip": "0.0.0.0"
    }
  ]
}
```

- show SNMPv3 forth user information

curl -v http://<IP>/api/network/snmpv3/user/4/ -H "Authorization: Bearer <token>"

```
{
  "name": "cyber snmpv3 user4",
  "status": "disable",
  "authprotocol": "none",
  "authpasswd": "",
  "privprotocol": "none",
  "privpasswd": "",
  "ip": "0.0.0.0"
}
```

- enable SNMPv3 access

curl -X PUT http://<IP>/api/network/snmpv3/ -H "Authorization: Bearer <token>" -d '{"access": "true"}'

- set SNMPv3 forth user IP as 192.168.0.201

curl -X PUT http://<IP>/api/network/snmpv3/user/4/ -H "Authorization: Bearer <token>" -d '{"ip": "192.168.0.201"}'

- **set SNMPv3 secondary snmp user authentication protocol as md5 and authentication password as 1111111111111111.**

```
curl -X PUT http://<IP>/api/network/snmpv3/user/2/ -H  
"Authorization: Bearer <token>" -d  
'{"authprotocol":"md5","authpasswd":"1111111111111111"}'
```

- **set SNMPv3 primary snmp user IP as 192.168.0.202 and set secondary snmp user IP as 192.168.0.203**

```
curl -X PUT http://<IP>/api/network/snmpv3/user/ -H "Authorization:  
Bearer <token>" -d  
'{"user":[{"ip":"192.168.0.202"}, {"ip":"192.168.0.203"}]}'
```

- ⇒ "name" → <String>
- ⇒ "status" → "enable" 、 "disable"
- ⇒ "authprotocol" → "md5" 、 "sha"
- ⇒ "authpasswd" → <String>
- ⇒ "privprotocol" → "des" 、 "aes"
- ⇒ "privpasswd" → <String>
- ⇒ "ip" → <String>

- **show information of Web**

```
curl -v http://<IP>/api/network/web/ -H "Authorization: Bearer  
<token>"
```

```

{
  "access": "http",
  "httpport": 80,
  "httpsport": 443,
  "alg": [
    {
      "name": "TLS_DHE_RSA_WITH_AES_256_CBC_SHA",
      "status": "true"
    },
    {
      "name": "TLS_DHE_RSA_WITH_CAMELLIA_256_CBC_SHA",
      "status": "true"
    },
    {
      "name": "TLS_RSA_WITH_AES_256_CBC_SHA",
      "status": "true"
    },
    {
      "name": "TLS_RSA_WITH_CAMELLIA_256_CBC_SHA",
      "status": "true"
    },
    {
      "name": "TLS_RSA_WITH_AES_128_CBC_SHA",
      "status": "true"
    },
    {
      "name": "TLS_RSA_WITH_CAMELLIA_128_CBC_SHA",
      "status": "true"
    },
    {
      "name": "TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256",
      "status": "true"
    },
    {
      "name": "TLS_DHE_RSA_WITH_AES_128_CBC_SHA",
      "status": "true"
    },
    {
      "name": "TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384",
      "status": "true"
    },
    {
      "name": "TLS_DHE_RSA_WITH_CAMELLIA_128_CBC_SHA",
      "status": "true"
    },
    {
      "name": "TLS_DHE_RSA_WITH_AES_256_GCM_SHA384",
      "status": "true"
    },
    {
      "name": "TLS_RSA_WITH_AES_256_CBC_SHA256",
      "status": "true"
    },
    {
      "name": "TLS_RSA_WITH_AES_128_CBC_SHA256",
      "status": "true"
    }
  ]
}

```

- set HTTP port as 5000
 curl -X PUT http://<IP>/api/network/web/httpport/ -H "Authorization: Bearer <token>" -d '{"httpport":5000}'
- disable TLS_DHE_DSS_WITH_AES_128_CBC_SHA algorithm of HTTPS
 curl -X PUT http://<IP>/api/network/web/alg/1/ -H "Authorization: Bearer <token>" -d '{"status":"false"}'
- show information of console

curl -v http://<IP>/api/network/console/ -H "Authorization: Bearer <token>"

```
{
  "access": "ssh",
  "telnetport": 23,
  "sshport": 22
}
```

- **disable Telnet and Enable SSH**

curl -X PUT http://<IP>/api/network/console/ -H "Authorization: Bearer <token>" -d '{"access":"ssh"}'

⇒ "access" → "disable" 、 "ssh" 、 "telnet"

- **show information of FTP**

curl -v http://<IP>/api/network/ftp/ -H "Authorization: Bearer <token>"

```
{
  "ftpaccess": "true",
  "ftpport": 21
}
```

- **disable FTP**

curl -X PUT http://<IP>/api/network/ftp/ -H "Authorization: Bearer <token>" -d '{"ftpaccess":"false"}'

6. Notification

```
curl -v http://<IP>/api/notification/ -H "Authorization: Bearer <token>"
```

```
{
  "event": {
    "security": [
      {
        "index": 61,
        "msg": "Login authorization failure via HTTP from [IP Address]",
        "log": "true",
        "email": "false",
        "trap": "false",
        "syslog": "false",
        "sms": "false"
      },
      {
        "index": 63,
        "msg": "Login authorization failure via Console from [IP Address]",
        "log": "true",
        "email": "false",
        "trap": "false",
        "syslog": "false",
        "sms": "false"
      },
      .
      .
      .
      {
        "index": 46,
        "msg": "Guest device in daisy chain do not have matching firmware",
        "log": "true",
        "email": "true",
        "trap": "true",
        "syslog": "true",
        "sms": "false"
      },
      {
        "index": 47,
        "msg": "Guest device firmware version mismatched has been cleared",
        "log": "true",
        "email": "true",
        "trap": "true",
        "syslog": "true",
        "sms": "false"
      }
    ]
  }
}
```

```

"smtp": {
  "server": "0.0.0.0",
  "senderemail": "",
  "sendername": "",
  "auth": "false",
  "account": "",
  "passwd": "",
  "encrypt": "none",
  "port": 25
},
"emailrcpt": {
  "num": 1,
  "rcptinfo": [
    {
      "index": 1,
      "email": "test@gmail.com",
      "status": "disable"
    }
  ]
},
"traprcpt": {
  "num": 2,
  "rcptinfo": [
    {
      "index": 1,
      "name": "testname",
      "status": "false",
      "version": 1,
      "ip": "192.168.0.202",
      "community": "testcomm"
    },
    {
      "index": 2,
      "name": "testname",
      "status": "false",
      "version": 3,
      "ip": "192.168.0.202",
      "username": "cyber snmpv3 user1"
    }
  ]
},
"sms": {
  "service": "clickatellold",
  "username": "Click_Name",
  "passwd": "Click_Pass",
  "apiid": "Click_api_ID"
},
"smsrcpt": {
  "num": 1,
  "rcptinfo": [
    {
      "index": 1,
      "status": "disable",
      "name": "test",
      "phone": "0123456789"
    }
  ]
}
}

```

- show security event

curl -v http://<IP>/api/notification/event/security/ -H "Authorization: Bearer <token>"

```

{
  "security": [
    {
      "index": 61,
      "msg": "Login authorization failure via HTTP from [IP Address]",
      "log": "true",
      "email": "false",
      "trap": "false",
      "syslog": "false",
      "sms": "false"
    },
    {
      "index": 63,
      "msg": "Login authorization failure via Console from [IP Address]",
      "log": "true",
      "email": "false",
      "trap": "false",
      "syslog": "false",
      "sms": "false"
    },
    .
    .
    .
  ],
  {
    "index": 47,
    "msg": "Guest device firmware version mismatched has been cleared",
    "log": "true",
    "email": "true",
    "trap": "true",
    "syslog": "true",
    "sms": "false"
  }
]
}

```

- enable send "Event "Login authentication failure via HTTP" via trap
 curl -X PUT http://<IP>/api/notification/event/security/1/ -H
 "Authorization: Bearer <token>" -d '{"trap": "true"}
- enable send "Event "The password has been change" via email and syslog
 curl -X PUT http://<IP>/api/notification/event/security/ -H
 "Authorization: Bearer <token>" -d '{"security": [{}],{"email":
 "true", "syslog": "true"},{}]}
- show SMTP server
 curl -v http://<IP>/api/notification/smtp/ -H "Authorization: Bearer
 <token>"

```

{
  "server": "0.0.0.0",
  "senderemail": "",
  "sendername": "",
  "auth": "false",
  "account": "",
  "passwd": "",
  "encrypt": "none",
  "port": 25
}

```

- **set SMTP server**

```
curl -X PUT http://<IP>/api/notification/smtp/ -H "Authorization: Bearer <token>" -d '{"server": "smtp.gmail.com", "senderemail": "test@gmail.com", "sendername": "test_name", "auth": "true", "account": "test@gmail.com", "passwd": "abcdefg", "encrypt": "tls", "port": 587}'
```

- ⇒ "server" → <String>
- ⇒ "senderemail" → <String>
- ⇒ "sendername" → <String>
- ⇒ "auth" → "true" 、 "false"
- ⇒ "account" → <String>
- ⇒ "passwd" → <String>
- ⇒ "encrypt" → "none" 、 "tls" 、 "ssl"
- ⇒ "port" → <Number>

- **show e-mail recipients**

```
curl -v http://<IP>/api/notification/emailrcpt/ -H "Authorization: Bearer <token>"
```

```
{
  "num": 1,
  "rcptinfo": [
    {
      "index": 1,
      "email": "test@gmail.com",
      "status": "disable"
    }
  ]
}
```

- **add e-mail recipient**

```
curl -X POST http://<IP>/api/notification/emailrcpt/rcptinfo/ -H "Authorization: Bearer <token>" -d '{"status": "enable", "email": "test@gmail.com"}'
```

- **delete first e-mail recipient**

```
curl -X DELETE http://<IP>/api/notification/emailrcpt/rcptinfo/ -H "Authorization: Bearer <token>" -d '{"index": 1}'
```

- **disable first e-mail recipient**

```
curl -X PUT http://<IP>/api/notification/emailrcpt/rcptinfo/1/ -H "Authorization: Bearer <token>" -d '{"status": "disable"}'
```

- ⇒ "status" → "enable" 、 "disable"
- ⇒ "email" → <String>

- send test message to first email recipient

```
curl -X POST http://<IP>/api/notification/emailrcpt/sendtest/ -H "Authorization: Bearer <token>" -d '{"index":1}'
```

- show trap recipients

```
curl -v http://<IP>/api/notification/traprcpt/ -H "Authorization: Bearer <token>"
```

```
{
  "num": 2,
  "rcptinfo": [
    {
      "index": 1,
      "name": "testname",
      "status": "false",
      "version": 1,
      "ip": "192.168.0.202",
      "community": "testcomm"
    },
    {
      "index": 2,
      "name": "testname",
      "status": "false",
      "version": 3,
      "ip": "192.168.0.202",
      "username": "cyber snmpv3 user1"
    }
  ]
}
```

- add SNMPv1 trap receiver

```
curl -X POST http://<IP>/api/notification/traprcpt/rcptinfo/ -H "Authorization: Bearer <token>" -d '{"name":"testname","ip":"192.168.0.202","status":"true","version":1,"community":"testcomm"}'
```

- add SNMPv3 trap receiver

```
curl -X POST http://<IP>/api/notification/traprcpt/rcptinfo/ -H "Authorization: Bearer <token>" -d '{"name":"testname","ip":"192.168.0.202","status":"true","version":3,"user_idx":1}'
```

- delete first trap receiver

```
curl -X DELETE http://<IP>/api/notification/traprcpt/rcptinfo/ -H "Authorization: Bearer <token>" -d '{"index":1}'
```

- set first trap receiver name as "testname"

```
curl -X PUT http://<IP>/api/notification/traprcpt/rcptinfo/1/ -H "Authorization: Bearer <token>" -d '{"name":"testname"}'
```

- ⇒ "name" → <String>
- ⇒ "status" → "true" 、 "false"
- ⇒ "version" → 1 、 3
- ⇒ "ip" → <String>
- ⇒ "community" → <String>

- **send test message to first trap receiver**

curl **-X POST** http://<IP>/api/notification/traprcpt/sendtest/ -H "Authorization: Bearer <token>" -d '{"index":1}'

- **show SMS server**

curl **-v** http://<IP>/api/notification/sms/ -H "Authorization: Bearer <token>"

```
{
  "service": "clickatelloid",
  "username": "Click_Name",
  "passwd": "Click_Pass",
  "apiid": "Click_api_ID"
}
```

- **show sms recipients**

curl **-v** http://<IP>/api/notification/smsrcpt/ -H "Authorization: Bearer <token>"

```
{
  "num": 1,
  "rcptinfo": [
    {
      "index": 1,
      "status": "disable",
      "name": "test",
      "phone": "0123456789"
    }
  ]
}
```

- **add sms recipient**

curl **-X POST** http://<IP>/api/notification/smsrcpt/rcptinfo/ -H "Authorization: Bearer <token>" -d '{"status":"enable","name":"test","phone":"0123456789"}'

- **delete first e-mail recipient**

curl **-X DELETE** http://<IP>/api/notification/smsrcpt/rcptinfo/ -H "Authorization: Bearer <token>" -d '{"index":1}'

- **disable first e-mail recipient**

curl **-X PUT** http://<IP>/api/notification/smsrcpt/rcptinfo/1/ -H

```
"Authorization: Bearer <token>" -d '{"status":"disable"}'
```

```
⇒ "status" → "enable" 、 "disable"
```

```
⇒ "name" → <String>
```

```
⇒ "phone" → <String>
```

- **send test message to first sms recipient**

```
curl -X POST http://<IP>/api/notification/smsrcpt/sendtest/ -H
```

```
"Authorization: Bearer <token>" -d '{"index":1}'
```

7. System

```
curl -v http://<IP>/api/system/ -H "Authorization: Bearer <token>"
```

```
{
  "sn": "TEST12345678",
  "modelName": "PDU81001",
  "mac": "00-0C-15-11-11-11",
  "hwversion": "1.1",
  "sysversion": "1.3.6",
  "updateDate": "08/06/2025"
}
```

- **show model name**

```
curl -v http://<IP>/api/system/modelName/ -H "Authorization: Bearer <token>"
```

- **reboot system**

```
curl -X POST http://<IP>/api/system/reboot/ -H "Authorization: Bearer <token>" -d '{"reboot": "true"}
```

- **reset system**

```
curl -X POST http://<IP>/api/system/reset/ -H "Authorization: Bearer <token>" -d '{"reset": "true"}
```

- **reset system (TCP/IP Settings Reserved)**

```
curl -X POST http://<IP>/api/system/resetnotcpip/ -H "Authorization: Bearer <token>" -d '{"resetnotcpip": "true"}
```

8. PDU&ATS Status

```
curl -v http://<IP>/api/pdudevstatus/ -H "Authorization: Bearer <token>"
```

PDU

```
{
  "load": {
    "devloada": "0.00",
    "devloadw": "0",
    "devloadva": "0",
    "power_factor": "----",
    "peakload": "0.00",
    "last_peakload_time": "08/06/2025 05:14:03",
    "energy": "0.0",
    "last_energy_time": "08/06/2025 05:14:03"
  },
  "utility": {
    "voltage": "113.6",
    "frequency": "60.0"
  }
}
```

ATS

```
{
  "source": {
    "selsource": "Source A",
    "prefsource": "Source A",
    "sourcevola": "114.1",
    "sourcevolb": "114.2",
    "sourcefreqa": "60.0",
    "sourcefreqb": "60.0",
    "sourcestata": "OK",
    "sourcestatb": "OK",
    "phasesync": "Yes"
  },
  "load": {
    "devloada": "0.00",
    "devloadw": "0",
    "devloadva": "0",
    "power_factor": "----",
    "peakload": "0.00",
    "last_peakload_time": "01/01/2016 00:16:13",
    "energy": "0.0",
    "last_energy_time": "01/01/2016 00:16:13"
  }
}
```

- show device source information (ATS Only)

```
curl -v http://<IP>/api/pdudevstatus/source/ -H "Authorization: Bearer <token>"
```

```
{
  "selsource": "Source A",
  "prefsource": "Source A",
  "sourcevola": "113.9",
  "sourcevolb": "113.9",
  "sourcefreqa": "60.0",
  "sourcefreqb": "60.0",
  "sourcestata": "OK",
  "sourcestatb": "OK",
  "phasesync": "Yes"
}
```

⇒ "selsource" → "Source A" 、 "Source B" 、 "None"

⇒ "prefsource" → "Source A" 、 "Source B" 、 "None"

- ⇒ "sourcevola" → <Number> (V)
- ⇒ "sourcevolb" → <Number> (V)
- ⇒ "sourcefreqa" → <Number> (Hz)
- ⇒ "sourcefreqb" → <Number> (Hz)
- ⇒ "sourcestata" → "Under Voltage" 、 "Over Voltage" 、 "Under Frequency" 、 "Over Frequency" 、 "OK"
- ⇒ "sourcestatb" → "Under Voltage" 、 "Over Voltage" 、 "Under Frequency" 、 "Over Frequency" 、 "OK"
- ⇒ "phasesync" → "No" 、 "Yes"

- **show device load information**

curl -v http://<IP>/api/pdudevstatus/load/ -H "Authorization: Bearer <token>"

```
{
  "devloada": "0.00",
  "devloadw": "0",
  "devloadva": "0",
  "power_factor": "-----",
  "peakload": "0.00",
  "last_peakload_time": "08/06/2025 05:14:03",
  "energy": "0.0",
  "last_energy_time": "08/06/2025 05:14:03"
}
```

- ⇒ "devloada" → <Number> (A) (Single Phase Model Only)
- ⇒ "devloadw" → <Number> (W)
- ⇒ "devloadva" → <Number> (VA)
- ⇒ "power_factor" → <Number>
- ⇒ "phaseL1_loada" → <Number> (A) (Three Phase Model Only)
- ⇒ "phaseL2_loada" → <Number> (A) (Three Phase Model Only)
- ⇒ "phaseL3_loada" → <Number> (A) (Three Phase Model Only)
- ⇒ "phaseL1-2_loada" → <Number> (A) (Three Phase Model Only)
- ⇒ "phaseL2-3_loada" → <Number> (A) (Three Phase Model Only)
- ⇒ "phaseL3-1_loada" → <Number> (A) (Three Phase Model Only)
- ⇒ "bank1_loada" → <Number> (A) (Support Bank Only)
- ⇒ "bank1_loadw" → <Number> (W) (Support Bank 、 Single Phase Model Only)
- ⇒ "bank2_loada" → <Number> (A) (Support Bank Only)
- ⇒ "bank2_loadw" → <Number> (W) (Support Bank 、 Single Phase Model Only)
- ⇒ "bank3_loada" → <Number> (A) (Support Bank Only)
- ⇒ "bank3_loadw" → <Number> (W) (Support Bank 、 Single Phase Model Only)
- ⇒ "bank4_loada" → <Number> (A) (Support Bank Only)
- ⇒ "bank4_loadw" → <Number> (W) (Support Bank 、 Single Phase Model Only)
- ⇒ "bank5_loada" → <Number> (A) (Support Bank Only)

- ⇒ "bank5_loadw" → <Number> (W) (Support Bank 、 Single Phase Model Only)
- ⇒ "bank6_loada" → <Number> (A) (Support Bank Only)
- ⇒ "bank6_loadw" → <Number> (W) (Support Bank 、 Single Phase Model Only)
- ⇒
- ⇒ "peakload" → <Number> (A)
- ⇒ "last_peakload_time" → <String> (mm/dd/yyyy hh:mm:ss)
- ⇒ "energy" → <Number> (WH)
- ⇒ "last_energy_time" → <String> (mm/dd/yyyy hh:mm:ss)

- **show device utility information (PDU Only)**

curl -v http://<IP>/api/pdudevstatus/utility/ -H "Authorization: Bearer <token>"

```
{
  "voltage": "113.5",
  "frequency": "60.0"
}
```

- ⇒ "voltage" → <Number> (V) (Single Phase Model Only)
- ⇒ "frequency" → <Number> (Hz) (Single Phase Model Only)
- ⇒ "phaseL1_voltage" → <Number> (V) (Three Phase Model Only)
- ⇒ "phaseL2_voltage" → <Number> (V) (Three Phase Model Only)
- ⇒ "phaseL3_voltage" → <Number> (V) (Three Phase Model Only)
- ⇒ "phaseL1-2_voltage" → <Number> (V) (Three Phase Model Only)
- ⇒ "phaseL2-3_voltage" → <Number> (V) (Three Phase Model Only)
- ⇒ "phaseL3-1_voltage" → <Number> (V) (Three Phase Model Only)

9. PDU&ATS Device Configuration

curl -v http://<IP>/api/pdudevconfig/ -H "Authorization: Bearer <token>"

```
{
  "load": {
    "overload_thre": 12,
    "nearload_thre": 9,
    "lowload_thre": 0,
    "restriction": "none"
  },
  "power_reset": {
    "rest_peakload_time": "08/06/2025 05:14:03",
    "rest_energy_time": "08/06/2025 05:14:03"
  },
  "coldstart": {
    "state": "all on",
    "delay": "instant"
  },
  "system": {
    "idle_time": "5"
  }
}
```

- show device load configuration

curl -v http://<IP>/api/pdudevconfig/load/ -H "Authorization: Bearer <token>"

```
{
  "overload_thre": 12,
  "nearload_thre": 9,
  "lowload_thre": 0,
  "restriction": "none"
}
```

<Number> Unit : Single Phase Model → (A), Three Phase Model → (W)

- set device overload threshold as 25A

curl -X PUT http://<IP>/api/pdudevconfig/load/ -H "Authorization: Bearer <token>" -d '{"overload_thre":25}'

⇒ "overload_thre" → <Number> (A)

⇒ "nearload_thre" → <Number> (A)

⇒ "lowload_thre" → <Number> (A)

⇒ "restriction" → "none" 、 "on nearload" 、 "on overload" (Support Switched Only)

- show device power reset time

curl -v http://<IP>/api/pdudevconfig/power_reset/ -H "Authorization: Bearer <token>"

```
{
  "rest_peakload_time": "08/06/2025 05:14:03",
  "rest_energy_time": "08/06/2025 05:14:03"
}
```

⇒ "rest_peakload_time" → <String> (mm/dd/yyyy hh:mm:ss)

⇒ "est_energy_time" → <String> (mm/dd/yyyy hh:mm:ss)

- **reset device peak load**

curl **-X PUT** http://<IP>/api/pdudevconfig/power_reset/ -H "Authorization: Bearer <token>" -d '{"peakload":"true"}'

⇒ "peakload" → "true"

⇒ "energy" → "true"

- **show device coldstart configuration (Support Switched Only)**

curl **-v** http://<IP>/api/pdudevconfig/coldstart/ -H "Authorization: Bearer <token>"

```
{
  "state": "all on",
  "delay": "instant"
}
```

- **set device coldstart state as previous (Support Switched Only)**

curl **-X PUT** http://<IP>/api/pdudevconfig/coldstart/ -H "Authorization: Bearer <token>" -d '{"state":"previous"}'

⇒ "state" → "previous" 、 "all on"

⇒ "delay" → "never" 、 "instant" 、 <Number>

- **show device system configuration**

curl **-v** http://<IP>/api/pdudevconfig/system/ -H "Authorization: Bearer <token>"

```
{
  "idle_time": "5"
}
```

- **set device idle time as 10 minutes**

curl **-X PUT** http://<IP>/api/pdudevconfig/system/ -H "Authorization: Bearer <token>" -d '{"idle_time":"10"}'

⇒ "idle_time" → "1" 、 "2" 、 "3" 、 "5" 、 "10" 、 "never" (minutes)

10. ATS Source Configuration (ATS Only)

curl -v http://<IP>/api/pdusrccconfig/ -H "Authorization: Bearer <token>"

```
{
  "source": {
    "prefsource": "a"
  },
  "frequency": {
    "nominalfreq": "60",
    "freqdeviation": "+/- 1"
  },
  "voltage": {
    "sensitivity": "High",
    "nominalvol": "120",
    "volrangepolicy": "Medium",
    "widevol": "+/- 20",
    "mediumvol": "+/- 12",
    "narrowvol": "+/- 8 V"
  }
}
```

- show source configuration

curl -v http://<IP>/api/pdusrccconfig/source/ -H "Authorization: Bearer <token>"

```
{
  "prefsource": "a"
}
```

- set prefer source as Source A

curl -X PUT http://<IP>/api/pdusrccconfig/source/ -H "Authorization: Bearer <token>" -d '{"prefsource": "a"}'

⇒ "prefsource" → "none" 、 "a" 、 "b"

- show source frequency configuration

curl -v http://<IP>/api/pdusrccconfig/frequency/ -H "Authorization: Bearer <token>"

```
{
  "nominalfreq": "60",
  "freqdeviation": "+/- 1"
}
```

- set source frequency deviation as ± 3 Hz

curl -X PUT http://<IP>/api/pdusrccconfig/frequency/ -H "Authorization: Bearer <token>" -d '{"freqdeviation": 3}'

⇒ "nominalfreq" → 50 、 60 (Hz) (Get only)

⇒ "freqdeviation" → 1 、 2 、 3 (\pm Hz)

⇒

- show source voltage configuration

curl -v http://<IP>/api/pdusrconfig/voltage/ -H "Authorization: Bearer <token>"

```
{
  "sensitivity": "High",
  "nominalvol": "120",
  "volrangepolicy": "Medium",
  "widevol": "+/- 20",
  "mediumvol": "+/- 12",
  "narrowvol": "+/- 8 V"
}
```

- **set source voltage sensitivity as low**

curl -X PUT http://<IP>/api/pdusrconfig/voltage/ -H "Authorization: Bearer <token>" -d '{"sensitivity":"low"}'

⇒ "sensitivity" → "high" 、 "low"

⇒ "nomivol" → 100 、 110 、 120 、 208 、 220 、 230 、 240 (V)

⇒ "volrangepolicy" → "wide" 、 "medium" 、 "narrow"

⇒ "widevol" → <Number> (V)

⇒ "mediumvol" → <Number> (V)

⇒ "narrowvol" → <Number> (V)

11. PDU Phase Configuration (Three Phase Model Only)

```
curl -v http://<IP>/api/pduphaseconfig/ -H "Authorization: Bearer <token>"
```

```
{
  "phasenum": 3,
  "phase": [
    {
      "number": 1,
      "overload_thre": 24,
      "nearload_thre": 18,
      "lowload_thre": 0,
      "restriction": "none"
    },
    {
      "number": 2,
      "overload_thre": 24,
      "nearload_thre": 18,
      "lowload_thre": 0,
      "restriction": "none"
    },
    {
      "number": 3,
      "overload_thre": 24,
      "nearload_thre": 18,
      "lowload_thre": 0,
      "restriction": "none"
    }
  ]
}
```

- show the number of Phase

```
curl -v http://<IP>/api/pduphaseconfig/phasenum/ -H "Authorization: Bearer <token>"
```

- show first bank configuration

```
curl -v http://<IP>/api/pduphaseconfig/phase/1/ -H "Authorization: Bearer <token>"
```

```
1 {
2   "number": 1,
3   "overload_thre": 24,
4   "nearload_thre": 18,
5   "lowload_thre": 0,
6   "restriction": "none"
7 }
```

- set phase overload threshold as 10A

```
curl -X PUT http://<IP>/api/pduphaseconfig/phase/1/ -H "Authorization: Bearer <token>" -d '{"overload_thre":10}'
```

- ⇒ "number" → <Number> (Get Only)
- ⇒ "overload_thre" → <Number> (A)
- ⇒ "nearload_thre" → <Number> (A)
- ⇒ "lowload_thre" → <Number> (A)
- ⇒ "restriction" → "none" 、 "on nearload" 、 "on overload"

12. PDU&ATS Bank Configuration (Support Bank Only)

```
curl -v http://<IP>/api/pdubankconfig/ -H "Authorization: Bearer <token>"
```

```
{
  "banknum": 2,
  "bank": [
    {
      "number": 1,
      "overload_thre": 12,
      "nearload_thre": 9,
      "lowload_thre": 0,
      "restriction": "none"
    },
    {
      "number": 2,
      "overload_thre": 12,
      "nearload_thre": 9,
      "lowload_thre": 0,
      "restriction": "none"
    }
  ]
}
```

- show the number of bank

```
curl -v http://<IP>/api/pdubankconfig/banknum/ -H "Authorization: Bearer <token>"
```

- show first bank configuration

```
curl -v http://<IP>/api/pdubankconfig/bank/1/ -H "Authorization: Bearer <token>"
```

```
{
  "number": 1,
  "overload_thre": 12,
  "nearload_thre": 9,
  "lowload_thre": 0,
  "restriction": "none"
}
```

- set bank1 overload threshold as 10A

```
curl -X PUT http://<IP>/api/pdudevconfig/bank/1/ -H "Authorization: Bearer <token>" -d '{"overload_thre":10}'
```

- ⇒ "number" → <Number> (Get Only)
- ⇒ "overload_thre" → <Number> (A)
- ⇒ "nearload_thre" → <Number> (A)
- ⇒ "lowload_thre" → <Number> (A)
- ⇒ "restriction" → "none" 、 "on nearload" 、 "on overload"

13. PDU&ATS Outlet Status

curl -v http://<IP>/api/pduoltstatus/ -H "Authorization: Bearer <token>"

```
{
  "oltnum": 8,
  "outlet": [
    {
      "number": 1,
      "name": "Outlet1",
      "status": "On",
      "loada": "0.00",
      "loadw": "0",
      "peakload": "1",
      "last_peakload_time": "08/06/2025 05:15:58",
      "energy": "0.0",
      "last_energy_time": "08/06/2025 05:14:03"
    },
    {
      "number": 2,
      "name": "Outlet2",
      "status": "On",
      "loada": "0.00",
      "loadw": "0",
      "peakload": "0",
      "last_peakload_time": "08/06/2025 05:14:03",
      "energy": "0.0",
      "last_energy_time": "08/06/2025 05:14:03"
    },
    .
    .
    .
    {
      "number": 8,
      "name": "Outlet8",
      "status": "On",
      "loada": "0.00",
      "loadw": "0",
      "peakload": "1",
      "last_peakload_time": "08/06/2025 05:14:54",
      "energy": "0.0",
      "last_energy_time": "08/06/2025 05:14:03"
    }
  ]
}
```

- show the number of outlet

curl -v http://<IP>/api/pduoltstatus/oltnum/ -H "Authorization: Bearer <token>"

- show first outlet configuration

curl -v http://<IP>/api/pduoltstatus/outlet/1/ -H "Authorization: Bearer <token>"

```
{
  "number": 1,
  "name": "Outlet1",
  "status": "On",
  "loada": "0.00",
  "loadw": "0",
  "peakload": "1",
  "last_peakload_time": "08/06/2025 05:15:58",
  "energy": "0.0",
  "last_energy_time": "08/06/2025 05:14:03"
}
```

- ⇒ "number" → <Number> (Get Only)
- ⇒ "name" → <String>
- ⇒ "Phase" → <String> (Three Phase Model Only)
- ⇒ "bank" → <Number> (Support Bank Only)
- ⇒ "status" → "On" 、 "Off" (Support Switched Only)
- ⇒ "loada" → <Number> (A) (Support Metered Only)
- ⇒ "loadw" → <Number> (W) (Support Metered Only)
- ⇒ "peakload" → <Number> (A) (Support Metered Only)
- ⇒ "last_peakload_time" → <String> (mm/dd/yyyy hh:mm:ss) (Support Metered Only)
- ⇒ "energy" → <Number> (WH) (Support Metered Only)
- ⇒ "last_energy_time" → <String> (mm/dd/yyyy hh:mm:ss) (Support Metered Only)

14. PDU&ATS Outlet Configuration (Support Metered Only)

```
curl -v http://<IP>/api/pduoltconfig/ -H "Authorization: Bearer <token>"
```

```
{
  "oltnum": 8,
  "outlet": [
    {
      "number": 1,
      "name": "Outlet1",
      "on_delay": "3",
      "off_delay": "3",
      "reboot_duration": 5,
      "overload_thre": 1440,
      "nearload_thre": 1080,
      "lowload_thre": 0
    },
    {
      "number": 2,
      "name": "Outlet2",
      "on_delay": "3",
      "off_delay": "3",
      "reboot_duration": 5,
      "overload_thre": 1440,
      "nearload_thre": 1080,
      "lowload_thre": 0
    },
    .
    .
    .
    {
      "number": 8,
      "name": "Outlet8",
      "on_delay": "3",
      "off_delay": "3",
      "reboot_duration": 5,
      "overload_thre": 1440,
      "nearload_thre": 1080,
      "lowload_thre": 0
    }
  ]
}
```

- show the number of outlet

```
curl -v http://<IP>/api/pduoltconfig/oltnum/ -H "Authorization: Bearer <token>"
```

- show first outlet configuration

```
curl -v http://<IP>/api/pduoltconfig/outlet/1/ -H "Authorization: Bearer <token>"
```

```
{
  "number": 1,
  "name": "Outlet1",
  "on_delay": "3",
  "off_delay": "3",
  "reboot_duration": 5,
  "overload_thre": 1440,
  "nearload_thre": 1080,
  "lowload_thre": 0
}
```

- **set first bank outlets name as cyber2 (Support Bank Only)**

```
curl -X PUT http://<IP>/api/pduoltconfig/outlet/bank1/ -H "Authorization: Bearer <token>" -d '{"name":"cyber2"}'
```

- **set all outlets on delay as 10 seconds**

```
curl -X PUT http://<IP>/api/pduoltconfig/outlet/all/ -H "Authorization: Bearer <token>" -d '{"on_delay":"10"}'
```

- **set second outlet overload threshold as 1400**

```
curl -X PUT http://<IP>/api/pduoltconfig/outlet/2/ -H "Authorization: Bearer <token>" -d '{"overload_thre":1400}'
```

- ⇒ "number" → <Number> (Get Only)
- ⇒ "name" → <String>
- ⇒ "Phase" → <String> (Three Phase Model Only 、 Get Only)
- ⇒ "bank" → <Number> (A) (Support Bank Only 、 Get Only)
- ⇒ "on_delay" → "never" 、 "instant" 、 "<Number>" (Seconds)
- ⇒ "off_delay" → "never" 、 "instant" 、 "<Number>" (Seconds)
- ⇒ "reboot_delay" → <Number> (Seconds)
- ⇒ "overload_thre" → <Number> (W)
- ⇒ "nearload_thre" → <Number> (W)
- ⇒ "lowload_thre" → <Number> (W)
- ⇒ "peak_load" → "true" (Reset Outlet peak load record)
- ⇒ "energy" → "true" (Reset Outlet energy record)

15. PDU&ATS Outlet Control (Support Switched Only)

```
curl -v http://<IP>/api/pduoltcontrol/ -H "Authorization: Bearer <token>"
```

```
{
  "oltnum": 8,
  "outlet": [
    {
      "number": 1,
      "name": "Outlet1",
      "status": "on"
    },
    {
      "number": 2,
      "name": "Outlet2",
      "status": "on"
    },
    {
      "number": 3,
      "name": "Outlet3",
      "status": "on"
    },
    {
      "number": 4,
      "name": "Outlet4",
      "status": "on"
    },
    {
      "number": 5,
      "name": "Outlet5",
      "status": "on"
    },
    {
      "number": 6,
      "name": "Outlet6",
      "status": "on"
    },
    {
      "number": 7,
      "name": "Outlet7",
      "status": "on"
    },
    {
      "number": 8,
      "name": "Outlet8",
      "status": "on"
    }
  ]
}
```

- show the number of outlet

```
curl -v http://<IP>/api/pduoltcontrol/oltnum/ -H "Authorization: Bearer <token>"
```

- show first outlet status

```
curl -v http://<IP>/api/pduoltcontrol/outlet/1/ -H "Authorization: Bearer <token>"
```

```
{
  "number": 1,
  "name": "Outlet1",
  "status": "on"
}
```

- **set PhaseL1-2 outlets as off**

```
curl -X PUT http://<IP>/api/pduoltcontrol/outlet/phaseL1-2/ -H  
"Authorization: Bearer <token>" -d '{"action":"off"}
```

- **set first bank outlets as on**

```
curl -X PUT http://<IP>/api/pduoltcontrol/outlet/bank1/ -H  
"Authorization: Bearer <token>" -d '{"action":"on"}
```

- **set all outlets as delayed off**

```
curl -X PUT http://<IP>/api/pduoltcontrol/outlet/all/ -H  
"Authorization: Bearer <token>" -d '{"action":"off delayed"}
```

- **cancel second outlet control**

```
curl -X PUT http://<IP>/api/pduoltcontrol/outlet/2/ -H  
"Authorization: Bearer <token>" -d '{"action":"cancel"}
```

- ⇒ "number" → <Number> (Get Only)
- ⇒ "name" → <String> (Get Only)
- ⇒ "phase" → <String> (Three Phase Model Only 、 Get Only)
- ⇒ "bank" → <Number> (A) (Support Bank Only 、 Get Only)
- ⇒ "status" → "On" 、 "Off" (Get Only)
- ⇒ "action" → "on" 、 "off" 、 "reboot" 、 "on delayed" 、 "off delayed" 、 "reboot delayed" 、 "cancel" (Set Only)

16. PDU&ATS Schedule (Support Switched Only)

```
curl -v http://<IP>/api/pdusche/ -H "Authorization: Bearer <token>"
```

```
{
  "schemum": 3,
  "schedule": [
    {
      "index": 1,
      "name": "Schedule Name1",
      "status": "enable",
      "action": "on",
      "action_date": "08/07/2025",
      "action_time": "06:29",
      "frequency": "once",
      "ctrl_outlet": "1,2,3,4,5,6,7,8"
    },
    {
      "index": 2,
      "name": "Schedule Name2",
      "status": "enable",
      "action": "off",
      "action_date": "each",
      "action_time": "06:29",
      "frequency": "daily",
      "ctrl_outlet": "1,3,5,7"
    },
    {
      "index": 3,
      "name": "Schedule Name3",
      "status": "enable",
      "action": "reboot delayed",
      "action_date": "wed.",
      "action_time": "06:29",
      "frequency": "weekly",
      "ctrl_outlet": "1"
    }
  ]
}
```

- show the number of schedule

```
curl -v http://<IP>/api/pdusche/schemum/ -H "Authorization: Bearer <token>"
```

- show first schedule

```
curl -v http://<IP>/api/pdusche/schedule/1/ -H "Authorization: Bearer <token>"
```

```
{
  "index": 1,
  "name": "Schedule Name1",
  "status": "enable",
  "action": "on",
  "action_date": "08/07/2025",
  "action_time": "06:29",
  "frequency": "once",
  "ctrl_outlet": "1,2,3,4,5,6,7,8"
}
```

- add once schedule all outlet off

```
curl -X POST http://<IP>/api/pdusche/schedule/ -H "Authorization: Bearer <token>" -d
```

```
'{"name":"schedule1","status":"enable","action":"off","frequency":"o
```

```
nce","action_time":"01:02","action_date":"2025/03/04","ctrl_outlet":  
:"all"}
```

- **add daily schedule PhaseL2-3 outlet delayed off**

```
curl -X POST http://<IP>/api/pdusche/schedule/ -H "Authorization:  
Bearer <token>" -d  
'{"name":"schedule2","status":"enable","action":"off  
delayed","frequency":"daily","action_time":"11:12","ctrl_outlet":"ph  
aseL2-3"}
```

- **add daily schedule first bank outlet delayed off**

```
curl -X POST http://<IP>/api/pdusche/schedule/ -H "Authorization:  
Bearer <token>" -d  
'{"name":"schedule2","status":"enable","action":"off  
delayed","frequency":"daily","action_time":"11:12","ctrl_outlet":"ba  
nk1"}
```

- **add weekly schedule second outlet reboot**

```
curl -X POST http://<IP>/api/pdusche/schedule/ -H "Authorization:  
Bearer <token>" -d  
'{"name":"schedule3","status":"enable","action":"reboot","frequency  
":"weekly","action_time":"21:22","action_date":"wed","ctrl_outlet":"  
2"}
```

- **delete first schedule**

```
curl -X DELETE http://<IP>/api/pdusche/schedule/ -H "Authorization:  
Bearer <token>" -d '{"index": 1}'
```

- **set second schedule name as test**

```
curl -X PUT http://<IP>/api/pdusche/schedule/2/ -H "Authorization:  
Bearer <token>" -d '{"name":"test"}
```

⇒ "index" → <Number> (Get Only)

⇒ "name" → <String>

⇒ "status" → "enable" 、 "disable"

⇒ "action" → "on" 、 "off" 、 "reboot" 、 "on delayed" 、 "off delayed" 、 "reboot
delayed"

⇒ "frequency" → "once" 、 "daily" 、 "weekly"

⇒ "action_time" → <String> (hh:mm)

- ⇒ "action_date" → <String> (yyyy/mm/dd) (once Only) 、
"action_date" → "sun" 、 "mon" 、 "tue" 、 "wed" 、 "thu" 、 "fri" 、 "sat"
(weekly Only)
- ⇒ "ctrl_outlet" → "phaseL1" 、 "phaseL2" 、 "phaseL3" 、 "phaseL1-2" 、
"phaseL2-3" 、 "phaseL3-1" 、 "bank1" 、 "bank2" 、 "bank3" 、 "bank4" 、
"bank5" 、 "bank6" 、 "all" 、 <String> (outlet list)

17. PDU&ATS Auto Ping (Support Switched Only)

```
curl -v http://<IP>/api/pduautoping/ -H "Authorization: Bearer <token>"
```

```
{
  "autoping_num": 1,
  "autoping_info": [
    {
      "index": 1,
      "status": "attempting connection",
      "name": "AutoPing Name1",
      "active": "enable",
      "priority_ip_used": "yes",
      "priority_ip": "8.8.8.8",
      "target_ip": "1.1.1.1",
      "period": 30,
      "retries": 5,
      "fail_action": "reboot",
      "reboot_times": 3,
      "recovery_action": "on",
      "restart_delay": 1,
      "ctrl_outlet": "1,2,3,4,5,6,7,8"
    }
  ]
}
```

- show the number of auto ping

```
curl -v http://<IP>/api/pduautoping/autoping_num/ -H "Authorization: Bearer <token>"
```

- show first auto ping

```
curl -v http://<IP>/api/pduautoping/autoping_info/ -H "Authorization: Bearer <token>"
```

```
{
  "index": 1,
  "status": "success",
  "name": "AutoPing Name1",
  "active": "enable",
  "priority_ip_used": "yes",
  "priority_ip": "8.8.8.8",
  "target_ip": "1.1.1.1",
  "period": 30,
  "retries": 5,
  "fail_action": "reboot",
  "reboot_times": 3,
  "recovery_action": "on",
  "restart_delay": 1,
  "ctrl_outlet": "1,2,3,4,5,6,7,8"
}
```

- add auto ping

```
curl -X POST http://<IP>/api/pduautoping/autoping_info/ -H "Authorization: Bearer <token>" -d
```

```
'{"name":"autoping1","active":"enable","priority_ip_used":"yes","priority_ip":"8.8.8.8","priority_ip":"1.1.1.1","period":30,"retries":5,"fail_action":"reboot","reboot_times":3,"
```

```
recovery_action":"on","restart_delay":"1","ctrl_outlet":"all"}
```

- **delete first auto ping**

```
curl -X DELETE http://<IP>/api/pduautoping/autoping_info/ -H  
"Authorization: Bearer <token>" -d '{"index": 1}'
```

- **set second auto ping name as testping**

```
curl -X PUT http://<IP>/api/pduautoping/autoping_info/2/ -H  
"Authorization: Bearer <token>" -d '{"name":"testping"}
```

⇒ "index" → <Number> (Get Only)

⇒ "status" → "success" 、 "failed" 、 "attempting connection" 、 "disabled" (Get Only)

⇒ "name" → <String>

⇒ "active" → "enable" 、 "disable"

⇒ "priority_ip_used" → "yes" 、 "no"

⇒ "priority_ip" → <String>

⇒ "target_ip" → <String>

⇒ "period" → <Number> (seconds)

⇒ "retries" → <Number> (times)

⇒ "fail_action" → "on" 、 "off" 、 "reboot" 、 "none"

⇒ "reboot_times" → <Number> (times) (fail action is reboot Only)

⇒ "recovery_action" → "on" 、 "off" 、 "reboot" 、 "none"

⇒ "restart_delay" → <Number> (minutes)

⇒ "ctrl_outlet" → "phaseL1" 、 "phaseL2" 、 "phaseL3" 、 "phaseL1-2" 、
"phaseL2-3" 、 "phaseL3-1" 、 "bank1" 、 "bank2" 、 "bank3" 、 "bank4" 、
"bank5" 、 "bank6" 、 "all" 、 <String> (outlet list)

18. PDU&ATS Wake on Lan (Support Switched Only)

curl -v http://<IP>/api/pduwol/ -H "Authorization: Bearer <token>"

```
{
  "syncppb": "true",
  "outletturnon": "true",
  "remotelist": {
    "remotelist_num": 1,
    "remotelist_info": [
      {
        "index": 1,
        "status": "enable",
        "ip": "192.168.77.1",
        "mac": "AC-4A-56-1B-EF-70",
        "outlet": "#5.Outlet5"
      }
    ]
  },
  "manuallist": {
    "manuallist_num": 1,
    "manuallist_info": [
      {
        "index": 1,
        "status": "disable",
        "ip": "192.168.202.71",
        "mac": "50-EB-F6-8B-8B-33",
        "outlet": "#2.Outlet2"
      }
    ]
  }
}
```

- show load/sync with powerpanel remote list

curl -v http://<IP>/api/pduwol/ -H "Authorization: Bearer <token>"

- set load/sync with powerpanel remote list as on

curl -X PUT http://<IP>/api/pduwol/ -H "Authorization: Bearer <token>" -d '{"syncppb ":"true"}'

⇒ "syncppb" → "true" 、 "false"

⇒ "outletturnon" → "true" 、 "false"

- show the number of wake on lan remote

curl -v http://<IP>/api/pduwol/remotelist/remotelist_num/ -H "Authorization: Bearer <token>"

- show first wake on lan remote

curl -v http://<IP>/api/pduwol/remotelist/remotelist_info/ -H "Authorization: Bearer <token>"

```
{
  "index": 1,
  "status": "enable",
  "ip": "192.168.77.1",
  "mac": "AC-4A-56-1B-EF-70",
  "outlet": "#5.Outlet5"
}
```

- **show the number of wake on lan manual**

```
curl -v http://<IP>/api/pduwol/manuallist/manuallist_num/ -H  
"Authorization: Bearer <token>"
```

- **show first wake on lan manual**

```
curl -v http://<IP>/api/pduwol/manuallist/manuallist_info/ -H  
"Authorization: Bearer <token>"
```

```
{  
  "index": 1,  
  "status": "disable",  
  "ip": "192.168.202.71",  
  "mac": "50-EB-F6-8B-8B-33",  
  "outlet": "#2.Outlet2"  
}
```

- **add wake on lan manual**

```
curl -X POST http://<IP>/api/pduwol/manuallist/manuallist_info/ -H  
"Authorization: Bearer <token>" -d  
'{"status":"enable","ip":"8.8.8.8","outlet":2}'
```

- **delete first wake on lan manual**

```
curl -X DELETE http://<IP>/api/pduwol/manuallist/manuallist_info/ -  
H "Authorization: Bearer <token>" -d '{"index": 1}'
```

- **set second wake on lan manual**

```
curl -X PUT http://<IP>/api/pduwol/manuallist/manuallist_info/2/ -H  
"Authorization: Bearer <token>" -d '{"outlet":2}'
```

- ⇒ "index" → <Number> (Get Only)
- ⇒ "status" → "enable" 、 "disable" 、 "checking"
- ⇒ "ip" → <String>
- ⇒ "mac" → <String> (Get Only)
- ⇒ "outlet" → "na" 、 <String>

19. PDU EnergyWise (PDU Only)

curl -v http://<IP>/api/pduenergywise/ -H "Authorization: Bearer <token>"

```
{
  "configuration": {
    "version": "1.2.0",
    "status": "disable",
    "port": 43440,
    "domainname": "",
    "offstate_cache": "disable",
    "securemode": "disable",
    "secret": "*****"
  },
  "childrenlist": {
    "parent_num": 1,
    "parent_info": [
      {
        "index": 1,
        "name": "PDU_Base",
        "role": "base,role",
        "keywords": "endpoint,child,base",
        "importance": 1
      }
    ]
  },
  "children_num": 9,
  "children_info": [
    {
      "index": 1,
      "name": "PDU_Base",
      "role": "base,role",
      "keywords": "endpoint,child,base",
      "importance": 1
    },
    {
      "index": 2,
      "name": "Outlet1",
      "role": "outlet,role",
      "keywords": "endpoint,child,outlet",
      "importance": 1
    },
    {
      "index": 3,
      "name": "Outlet2",
      "role": "outlet,role",
      "keywords": "endpoint,child,outlet",
      "importance": 1
    },
    {
      "index": 4,
      "name": "Outlet3",
      "role": "outlet,role",
      "keywords": "endpoint,child,outlet",
      "importance": 1
    },
    {
      "index": 5,
      "name": "Outlet4",
      "role": "outlet,role",
      "keywords": "endpoint,child,outlet",
      "importance": 1
    },
    {
      "index": 6,
      "name": "Outlet5",
      "role": "outlet,role",
      "keywords": "endpoint,child,outlet",
      "importance": 1
    },
    {
      "index": 7,
      "name": "Outlet6",
      "role": "outlet,role",
      "keywords": "endpoint,child,outlet",
      "importance": 1
    },
    {
      "index": 8,
      "name": "Outlet7",
      "role": "outlet,role",
      "keywords": "endpoint,child,outlet",
      "importance": 1
    },
    {
      "index": 9,
      "name": "Outlet8",
      "role": "outlet,role",
      "keywords": "endpoint,child,outlet",
      "importance": 1
    },
    {
      "index": 10,
      "name": "Bank1",
      "role": "bank,role",
      "keywords": "endpoint,child,bank",
      "importance": 1
    }
  ]
}
```

- show configuration of energywise

curl -v http://<IP>/api/pduenergywise/configuration/ -H "Authorization: Bearer <token>"

```

{
  "version": "1.2.0",
  "status": "disable",
  "port": 43440,
  "domainname": "",
  "offstate_cache": "disable",
  "securemode": "disable",
  "secret": "*****"
}

```

- **enable energywise**

```

curl -X PUT http://<IP>/api/pduenergywise/configuration/ -H
"Authorization: Bearer <token>" -d '{"status":"enable"}'

```

- ⇒ "version" → <String>
- ⇒ "status" → "enable" 、 "disable"
- ⇒ "port" → <Number>
- ⇒ "domainname" → <String>
- ⇒ "offstate_cache" → "enable" 、 "disable"
- ⇒ "securemode" → "enable" 、 "disable"
- ⇒ "secret" → <String>

- **show the number of energywise parent**

```

curl -v http://<IP>/api/pduenergywise/childrenlist/parent_num/ -H
"Authorization: Bearer <token>"

```

- **show first energywise parent**

```

curl -v http://<IP>/api/pduenergywise/childrenlist/parent_info/1/ -H
"Authorization: Bearer <token>"

```

```

{
  "index": 1,
  "name": "PDU_Base",
  "role": "base,role",
  "keywords": "endpoint,child,base",
  "importance": 1
}

```

- **show the number of energywise children**

```

curl -v http://<IP>/api/pduenergywise/childrenlist/children_num/ -H
"Authorization: Bearer <token>"

```

- **show first energywise children**

```

curl -v http://<IP>/api/pduenergywise/childrenlist/children_info/1/ -
H "Authorization: Bearer <token>"

```

```
{
  "index": 1,
  "name": "PDU_Base",
  "role": "base,role",
  "keywords": "endpoint,child,base",
  "importance": 1
}
```

- set first energywise children name as test

curl -X PUT

http://<IP>/api/pduenergywise/childrenlist/children_info/1/ -H

"Authorization: Bearer <token>" -d '{"name":"test"}

⇒ "index" → <Number> (Get Only)

⇒ "name" → <String>

⇒ "role" → <String>

⇒ "keywords" → <String>

⇒ "importance" → <Number>

20. PDU&ATS PowerPanel List

```
curl -v http://<IP>/api/pduppb/ -H "Authorization: Bearer <token>"
```

```
{
  "remote_num": 1,
  "remote": [
    {
      "index": 1,
      "ip": "192.168.77.1",
      "name": "N10IT469",
      "location": "",
      "contact": "",
      "outlet": "5"
    }
  ],
  "management_num": 1,
  "management": [
    {
      "index": 1,
      "ip": "192.168.202.71",
      "name": "",
      "location": "",
      "contact": "",
      "outlet": "na"
    }
  ]
}
```

- show the number of PowerPanel remote

```
curl -v http://<IP>/api/pduppb/remote_num/ -H "Authorization: Bearer <token>"
```

- show first PowerPanel remote

```
curl -v http://<IP>/api/pduppb/remote/1/ -H "Authorization: Bearer <token>"
```

```
{
  "index": 1,
  "ip": "192.168.77.1",
  "name": "N10IT469",
  "location": "",
  "contact": "",
  "outlet": "5"
}
```

- show the number of PowerPanel management

```
curl -v http://<IP>/api/pduppb/management_num/ -H "Authorization: Bearer <token>"
```

- show first PowerPanel management

```
curl -v http://<IP>/api/pduppb/management/1/ -H "Authorization: Bearer <token>"
```

```
{
  "index": 1,
  "ip": "192.168.202.71",
  "name": "",
  "location": "",
  "contact": "",
  "outlet": "na"
}
```

- ⇒ "version" → <String>
- ⇒ "ip" → <String>
- ⇒ "name" → <String>
- ⇒ "location" → <String>
- ⇒ "contact" → <String>
- ⇒ "outlet" → "na" 、 <String>

21. ATS Event Counts (ATS Only)

```
curl -v http://<IP>/api/pdueventcount/ -H "Authorization: Bearer <token>"
```

```
{
  "src_switch": 18,
  "src_prefchange": 0,
  "prefsrcfreq_outrange": 11,
  "prefsrcvol_outrange": 11,
  "devcurrent_overload": 0
}
```

- show event counts of source switch

```
curl -v http://<IP>/api/pdueventcount/src_switch/ -H "Authorization: Bearer <token>"
```

- ⇒ "src_switch" → <Number> (Get Only)
- ⇒ "src_prefchange" → <Number> (Get Only)
- ⇒ "prefsrcfreq_outrange" → <Number> (Get Only)
- ⇒ "prefsrcvol_outrange" → <Number> (Get Only)
- ⇒ "devcurrent_overload" → <Number> (Get Only)
- ⇒ "bank1_overload" → <Number> (Support Bank Only ∙ Get Only)
- ⇒ "bank2_overload" → <Number> (Support Bank Only ∙ Get Only)
- ⇒ "bank3_overload" → <Number> (Support Bank Only ∙ Get Only)

- reset event counts

```
curl -X PUT http://<IP>/api/pdueventcount/ -H "Authorization: Bearer <token>" -d '{"clr_eventcounts":"true"}'
```

22. PDU&ATS Event Log

```
curl -v http://<IP>/api/pduevent/ -H "Authorization: Bearer <token>"
```

```
{
  "total_num": 46,
  "start": 0,
  "event": [
    {
      "date": "08/06/2025",
      "time": "07:39:26",
      "msg": "Admin user login from 192.168.202.78."
    },
    {
      "date": "08/06/2025",
      "time": "07:39:06",
      "msg": "Admin user logout from 192.168.202.71."
    },
    •
    •
    •
    {
      "date": "08/06/2025",
      "time": "07:38:27",
      "msg": "An outlet on a device has turned on. [1,2,3,4,5,6,7,8]"
    },
    {
      "date": "08/06/2025",
      "time": "07:38:26",
      "msg": "An outlet on a device has been assigned to turn on. [1,2,3,4,5,6,7,8]"
    }
  ]
}
```

(Show the top 10 events)

- **show next 10 events**

```
curl -X PUT http://<IP>/api/pduevent/event/ -H "Authorization: Bearer <token>" -d '{"nextpage":"true"}'
```

- **review events**

```
curl -X PUT http://<IP>/api/pduevent/event/ -H "Authorization: Bearer <token>" -d '{"review":"true"}'
```

- **clear all events**

```
curl -X PUT http://<IP>/api/pduevent/event/ -H "Authorization: Bearer <token>" -d '{"reset":"true"}'
```

23. PDU&ATS Status Record Data

curl -v http://<IP>/api/pdustarec/ -H "Authorization: Bearer <token>"

```
{
  "total_num": 6,
  "start": 0,
  "interval": 1,
  "intervallist": [
    1,
    2,
    5,
    10,
    20,
    30,
    60,
    120,
    240,
    480,
    720,
    1440
  ],
}
```

```

"rec": [
  {
    "date": "08/09/2025",
    "time": "00:05:59",
    "dev_curmax": 0,
    "dev_cur": 0,
    "dev_pow": 0,
    "dev_vol": 1134,
    "olt1_powmax": 0,
    "olt1_pow": 0,
    "olt2_powmax": 0,
    "olt2_pow": 0,
    "olt3_powmax": 0,
    "olt3_pow": 0,
    "olt4_powmax": 0,
    "olt4_pow": 0,
    "olt5_powmax": 0,
    "olt5_pow": 0,
    "olt6_powmax": 0,
    "olt6_pow": 0,
    "olt7_powmax": 0,
    "olt7_pow": 0,
    "olt8_powmax": 1,
    "olt8_pow": 0
  },
  .
  .
  .
  {
    "date": "08/09/2025",
    "time": "00:00:59",
    "dev_curmax": 0,
    "dev_cur": 0,
    "dev_pow": 0,
    "dev_vol": 1133,
    "olt1_powmax": 0,
    "olt1_pow": 0,
    "olt2_powmax": 0,
    "olt2_pow": 0,
    "olt3_powmax": 0,
    "olt3_pow": 0,
    "olt4_powmax": 0,
    "olt4_pow": 0,
    "olt5_powmax": 0,
    "olt5_pow": 0,
    "olt6_powmax": 1,
    "olt6_pow": 0,
    "olt7_powmax": 1,
    "olt7_pow": 0,
    "olt8_powmax": 0,
    "olt8_pow": 0
  }
]
}

```

(show the top 10 status records)

- show next 10 status records

```

curl -X PUT http://<IP>/api/pdustarec/rec/ -H "Authorization: Bearer <token>" -d '{"nextpage":"true"}'

```

- review status records

```

curl -X PUT http://<IP>/api/pdustarec/rec/ -H "Authorization: Bearer <token>" -d '{"review":"true"}'

```

- **clear all status records**

```
curl -X PUT http://<IP>/api/pdustarec/rec/ -H "Authorization: Bearer  
<token>" -d '{"reset":"true"}
```

24. PDU&ATS Energy Record Data

```
curl -v http://<IP>/api/pduegyrec/ -H "Authorization: Bearer <token>"
```

```
{
  "total_num": 1,
  "start": 0,
  "interval": "one_day",
  "intervallist": [
    "one_day",
    "one_week",
    "one_month"
  ],
  "elec_rate": 300,
  "co2_emiss": 60,
  "rec": [
    {
      "date": "08/07/2025",
      "time": "00:00:00",
      "interval_energy": 0,
      "interval_cost": 0,
      "interval_co2": 0,
      "energy": 0,
      "cost": 0,
      "co2": 0,
      "olt1_energy": 0,
      "olt2_energy": 0,
      "olt3_energy": 0,
      "olt4_energy": 0,
      "olt5_energy": 0,
      "olt6_energy": 0,
      "olt7_energy": 0,
      "olt8_energy": 0
    }
  ]
}
```

(show the top 10 energy records)

- **show next 10 energy records**

```
curl -X PUT http://<IP>/api/pduegyrec/rec/ -H "Authorization: Bearer <token>" -d '{"nextpage":"true"}'
```

- **review energy records**

```
curl -X PUT http://<IP>/api/pduegyrec/rec/ -H "Authorization: Bearer <token>" -d '{"review":"true"}'
```

- **clear all energy records**

```
curl -X PUT http://<IP>/api/pduegyrec/rec/ -H "Authorization: Bearer <token>" -d '{"reset":"true"}'
```

25. Syslog

curl -v http://<IP>/api/syslog/ -H "Authorization: Bearer <token>"

```
{
  "access": "false",
  "facility": 1,
  "servernum": 1,
  "server": [
    {
      "index": 1,
      "ip": "1.1.1.1",
      "port": 516
    }
  ]
}
```

- show the facility of syslog

curl -v http://<IP>/api/syslog/access/ -H "Authorization: Bearer <token>"

- show the number of syslog server

curl -v http://<IP>/api/syslog/servernum/ -H "Authorization: Bearer <token>"

- show first syslog server

curl -v http://<IP>/api/syslog/server/1/ -H "Authorization: Bearer <token>"

```
{
  "index": 1,
  "ip": "1.1.1.1",
  "port": 516
}
```

- enable syslog server

curl -X POST http://<IP>/api/syslog/ -H "Authorization: Bearer <token>" -d '{"access": "true"}'

⇒ "access" → "true", "false"

⇒ "facility" → <Number> (0 ~ 23)

- add syslog server

curl -X POST http://<IP>/api/syslog/server/ -H "Authorization: Bearer <token>" -d '{"ip": "1.1.1.1", "port": 516}'

- set first syslog server ip as 1.1.1.1 and port as 515

curl -X POST http://<IP>/api/syslog/server/ -H "Authorization: Bearer <token>" -d '{"ip": "1.1.1.1", "port": 515}'

⇒ "index" → <Number> (Get only)

⇒ "ip" → <String>

⇒ "port" → <Number>

- **delete syslog server**

```
curl -X DELETE http://<IP>/api/syslog/server/ -H "Authorization: Bearer <token>" -d '{"index": 1}'
```

26. Accessory

curl -v http://<IP>/api/accessory/ -H "Authorization: Bearer <token>"

```
{
  "env": {
    "unit": "celcius",
    "num": 1,
    "device": [
      {
        "status": {
          "name": "EnvSensor",
          "location": "Server Room",
          "temp": 25.99,
          "humid": 52.16
        },
        "config": {
          "name": "EnvSensor",
          "location": "Server Room",
          "tempthres": 32,
          "templthres": 15,
          "humthres": 80,
          "humlthres": 20
        }
      }
    ]
  }
}
```

- show information of first accessory environment sensor

curl -v http://<IP>/api/accessory/env/device/1/ -H "Authorization: Bearer <token>"

```
{
  "status": {
    "name": "EnvSensor",
    "location": "Server Room",
    "temp": 26.33,
    "humid": 49.9,
    "maxtemp": 26.33,
    "mintemp": 25.88,
    "maxhumi": 52.38,
    "minhumi": 49.9,
    "contact1name": "ENV_Contact#1-1",
    "contact1status": "Normal",
    "contact2name": "ENV_Contact#1-2",
    "contact2status": "Normal",
    "contact3name": "ENV_Contact#1-3",
    "contact3status": "Normal",
    "contact4name": "ENV_Contact#1-4",
    "contact4status": "Normal"
  },
  "config": {
    "name": "EnvSensor",
    "location": "Server Room",
    "tempthres": 32,
    "templthres": 15,
    "tempyster": 2,
    "tempchange": 10,
    "humthres": 80,
    "humlthres": 20,
    "humyster": 5,
    "humchange": 20,
    "contact1name": "ENV_Contact#1-1",
    "contact1state": "open",
    "contact2name": "ENV_Contact#1-2",
    "contact2state": "open",
    "contact3name": "ENV_Contact#1-3",
    "contact3state": "open",
    "contact4name": "ENV_Contact#1-4",
    "contact4state": "open"
  }
}
```

- **show temperature unit**
`curl -v http://<IP>/api/accessory/env/unit/ -H "Authorization: Bearer <token>"`

- **set first accessory environment sensor name as "testname"**
`curl -X PUT http://<IP>/api/accessory/env/device/1/config/ -H "Authorization: Bearer <token>" -d '{"name":"testname"}`

- **set temperature high threshold**
`curl -X PUT http://<IP>/api/accessory/env/device/1/config/ -H "Authorization: Bearer <token>" -d '{"temphthres":14}'`

- **set accessory basic**
`curl -X PUT http://<IP>/api/accessory/env/device/2/config/ -H "Authorization: Bearer <token>" -d '{"temphthres":31,"templthres":14,"tempyster":4,"tempchange":9,"humhthres":80,"humlthres":15,"humhyster":4,"humchange":10}'`

- **set accessory contact**
`curl -X PUT http://<IP>/api/accessory/env/device/2/config/ -H "Authorization: Bearer <token>" -d '{"contact4name":"conname4","contact4state":"close"}`
 - ⇒ "unit" → "celcius" 、 "fahrenheit"
 - ⇒ "name" → <String>
 - ⇒ "location" → <String>
 - ⇒ "temphthres" → <Number>
 - ⇒ "templthres" → <Number>
 - ⇒ "tempyster" → <Number>
 - ⇒ "tempchange" → <Number>
 - ⇒ "humhthres" → <Number>
 - ⇒ "humlthres" → <Number>
 - ⇒ "humhyster" → <Number>
 - ⇒ "humchange" → <Number>
 - ⇒ "contact1name" → <String>
 - ⇒ "contact1state" → "open" 、 "close"
 - ⇒ "contact2name" → <String>
 - ⇒ "contact2state" → "open" 、 "close"
 - ⇒ "contact3name" → <String>

- ⇒ "contact3state" → "open" 、 "close"
- ⇒ "contact4name" → <String>
- ⇒ "contact4state" → "open" 、 "close"



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