



Power Distribution Unit

LCD 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>"  
}
```

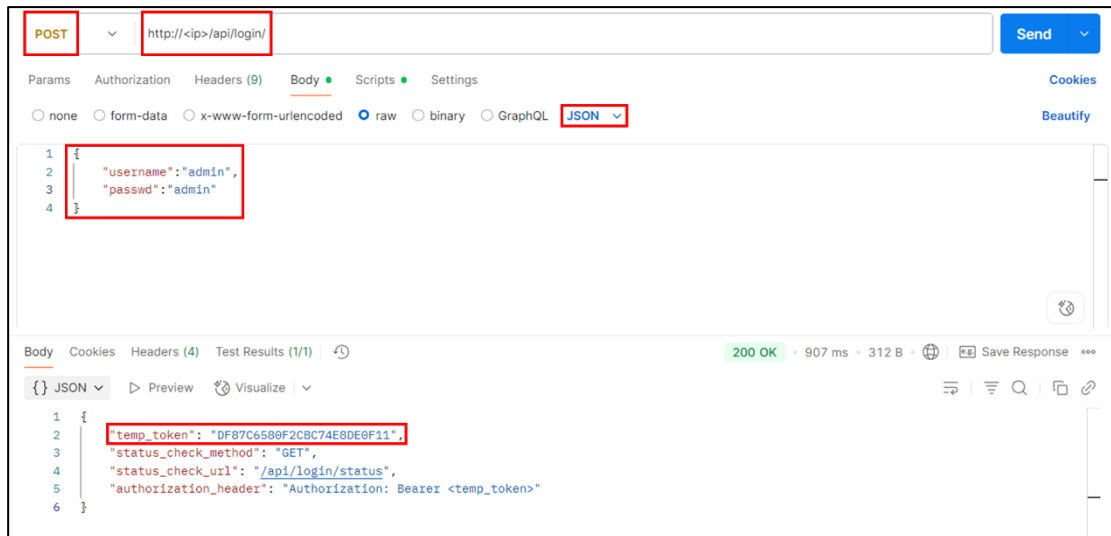
- **Step 2:** This step verifies the user's login status by sending a GET request with the Authorization header, which contains the **<temp_token>** obtained in Step 1.

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

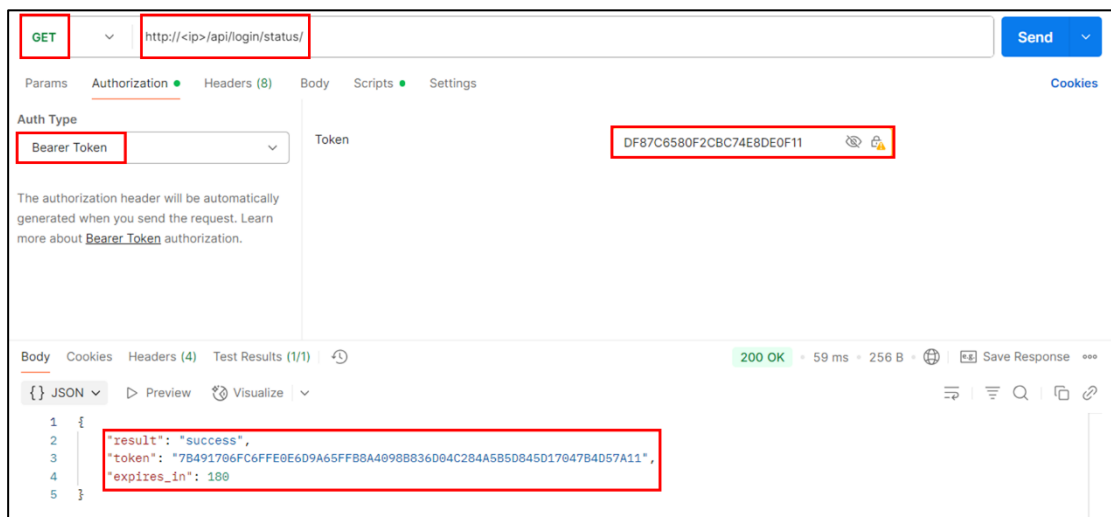
```
{  
  "result": "success",  
  "token": "B498373EDB82A5F76772CF10B370701767088BD7D6694036E6C561DAB965D259B",  
  "expires_in": 180  
}
```

Example for POSTMAN

- Step 1:



- Step 2:



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":"<DateFormat>"}'

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}"
```

- **set primary radius server**

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",
      "accrpn": "",
      "accrpn": "",
      "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": "pdu11111",
  "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 '{"dhcp":"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 index 2 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 index 2 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 index 4 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 index 4 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 index 2 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 index 1 user's IP as 192.168.0.202 and set index 2 user's 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 "Login authentication failure via HTTP", "Login
 authorization failure via Console" and "The password has been change" via
 email and syslog
 and keep same setting of Event "Configuration file uploaded"
 curl -X PUT http://<IP>/api/notification/event/security/ -H
 "Authorization: Bearer <token>" -d '{"security": [{"email":
 "true", "syslog": "true"}, {"email": "true", "syslog": "true"}, {"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"}'

⇒ Note : Settings will only take effect after logging out.

- **reset system**

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

⇒ Note : Settings will only take effect after logging out.

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

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

⇒ Note : Settings will only take effect after logging out.

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)
- ⇒ "devloadw" → <Number> (W)
- ⇒ "devloadva" → <Number> (VA)
- ⇒ "power_factor" → <Number>
- ⇒ "bank1_loada" → <Number> (A) (Support Bank Only)
- ⇒ "bank1_loadw" → <Number> (W) (Support Bank Only)
- ⇒ "bank2_loada" → <Number> (A) (Support Bank Only)
- ⇒ "bank2_loadw" → <Number> (W) (Support Bank Only)
- ⇒ "bank3_loada" → <Number> (A) (Support Bank Only)
- ⇒ "bank3_loadw" → <Number> (W) (Support Bank 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)

⇒ "frequency" → <Number> (Hz)

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"
}
```

- 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 $\pm 3\text{Hz}$

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 ($\pm\text{Hz}$)

⇒

- 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"

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

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

⇒ "widevol" → <Number> (V)

⇒ "mediumvol" → <Number> (V)

⇒ "narrowvol" → <Number> (V)

11. 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/pdubankconfig/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"

12. 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>
- ⇒ "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)

13. 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>
- ⇒ "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)

14. 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 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)
- ⇒ "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)

15. PDU&ATS Schedule (Support Switched Only)

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

```
{
  "schenum": 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/schenum/ -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 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" → "bank1" 、 "bank2" 、 "bank3" 、 "all" 、 <String> (outlet list)

16. 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/1/ -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","target_ip":"1.1.1.1","period":30,"retries":5,"fail_action":"reboot","reboot_times":3,"recovery_action":"on","restart_de

lay":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" → "bank1" 、 "bank2" 、 "bank3" 、 "all" 、 <String> (outlet list)

17. 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/syncppb/ -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":"192.168.202.71","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>

18. 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>

19. 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>

20. 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"}'

21. 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"}'

22. 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"}
```

23. 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"}'

24. 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 PUT 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 PUT http://<IP>/api/syslog/server/1/ -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}'

25. 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",
          "temphthres": 32,
          "templthres": 15,
          "humhthres": 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",
    "temphthres": 32,
    "templthres": 15,
    "temphyster": 2,
    "tempchange": 10,
    "humhthres": 80,
    "humlthres": 20,
    "humhyster": 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,"temphyster":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>

⇒ "temphyster" → <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"

26. Environment Sensor

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

```
{
  "name": "EnvSensor",
  "location": "Server Room",
  "temp": 27.7,
  "hum": 49,
  "unit": "celcius",
  "temphthres": 32,
  "templthres": 15,
  "temphyster": 2,
  "tempchange": 10,
  "humhthres": 80,
  "humlthres": 20,
  "humhyster": 5,
  "humchange": 20,
  "contact": [
    {
      "name": "Contact#1",
      "status": "Normal"
    },
    {
      "name": "Contact#2",
      "status": "Normal"
    },
    {
      "name": "Contact#3",
      "status": "Normal"
    },
    {
      "name": "Contact#4",
      "status": "Normal"
    }
  ]
}
```

- show information of first contact

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

- set environment sensor name as "testname"

curl -X PUT http://<IP>/api/env/ -H "Authorization: Bearer <token>" -d '{"name":"testname"}

- set environment sensor temperature high threshold

curl -X PUT http://<IP>/api/env/ -H "Authorization: Bearer <token>" -d '{"temphthres":14}'

- set environment sensor

curl -X PUT http://<IP>/api/env/ -H "Authorization: Bearer <token>" -d '{"temphthres":31,"templthres":14,"temphyster":4,"tempchange":9,"humhthres":80,"humlthres":15,"humhyster":4,"humchange":10}'

⇒ "name" → <String>

- ⇒ "location" → <String>
- ⇒ "unit" → "celcius" 、 "fahrenheit"
- ⇒ "temphthres" → <Number>
- ⇒ "templthres" → <Number>
- ⇒ "temphyster" → <Number>
- ⇒ "tempchange" → <Number>
- ⇒ "humhthres" → <Number>
- ⇒ "humlthres" → <Number>
- ⇒ "humhyster" → <Number>
- ⇒ "humchange" → <Number>

- **set environment sensor secondary contact**

curl -X PUT http://<IP>/api/env/contact/2/ -H "Authorization: Bearer
<token>" -d '{"name":"conname2","state":"close"}

- ⇒ "name" → <String>
- ⇒ "state" → "open" 、 "close"



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