Remote Management Card

RMCARD205

REST API Manual

The Remote Management Card allows a UPS system and environmental sensor to be managed, monitored, and configured.

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>"}'

Example Response

Body Headers (4) 200 OK

json


```
{
  "temp_token": "13C5A6888C4D9D2E83A80811",
  "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>"

Example Response

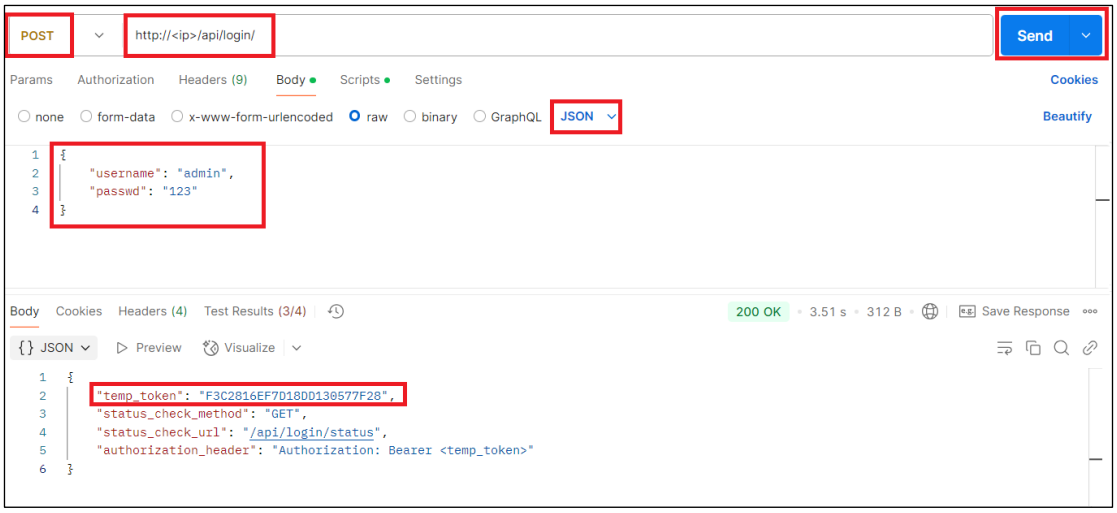
Body Headers (4) 200 OK

json

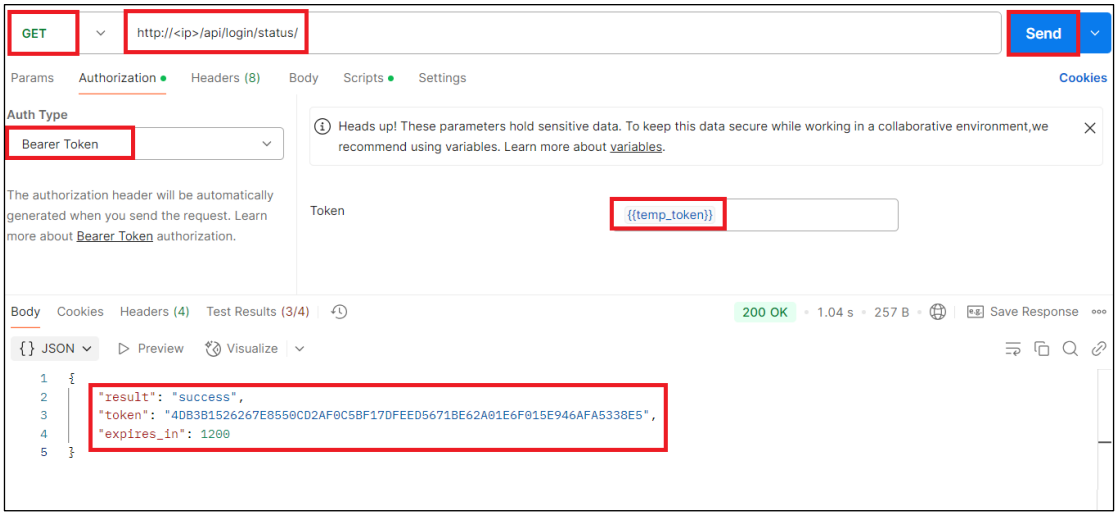

```
{
  "result": "success",
  "token": "DB174128725B798B2B3D78198C22EC4E821997CD3B4FEB6593021B2DA0FBD6AD",
  "expires_in": 1200
}
```

Example for POSTMAN

- **Step 1**:



- **Step 2**:

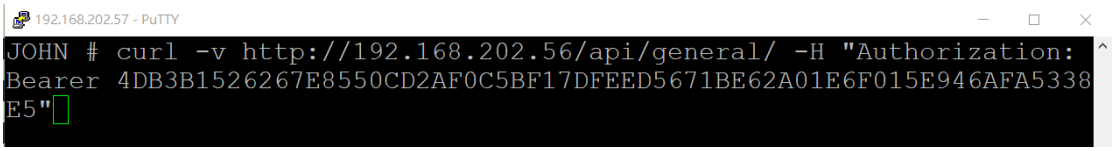


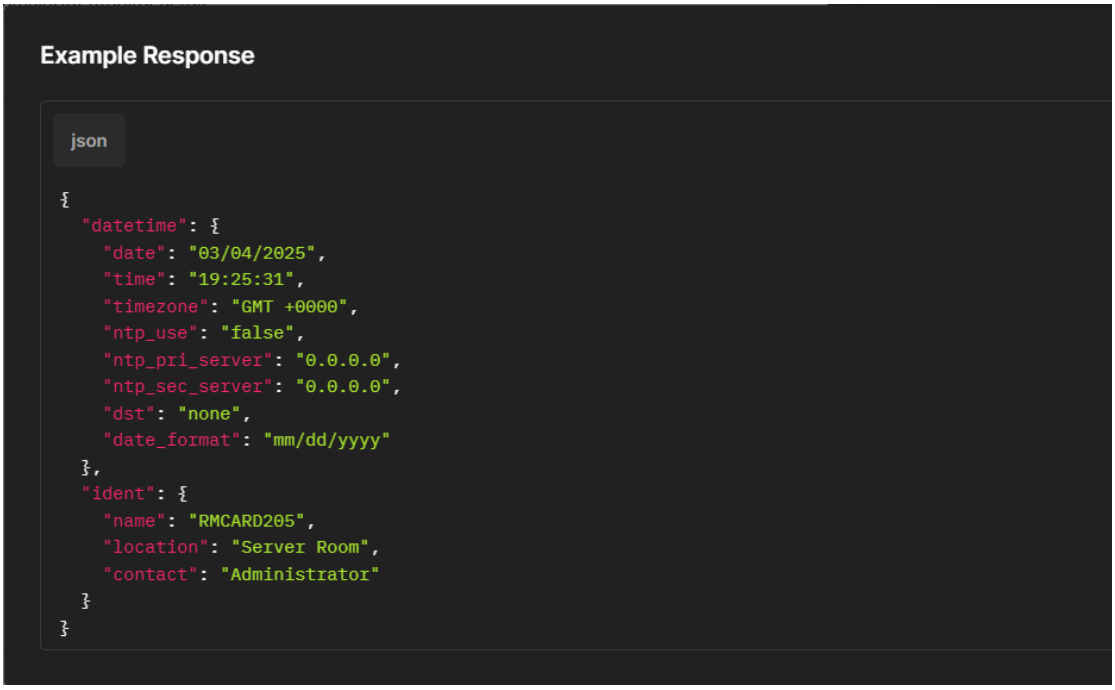
2. Logout

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

3. General

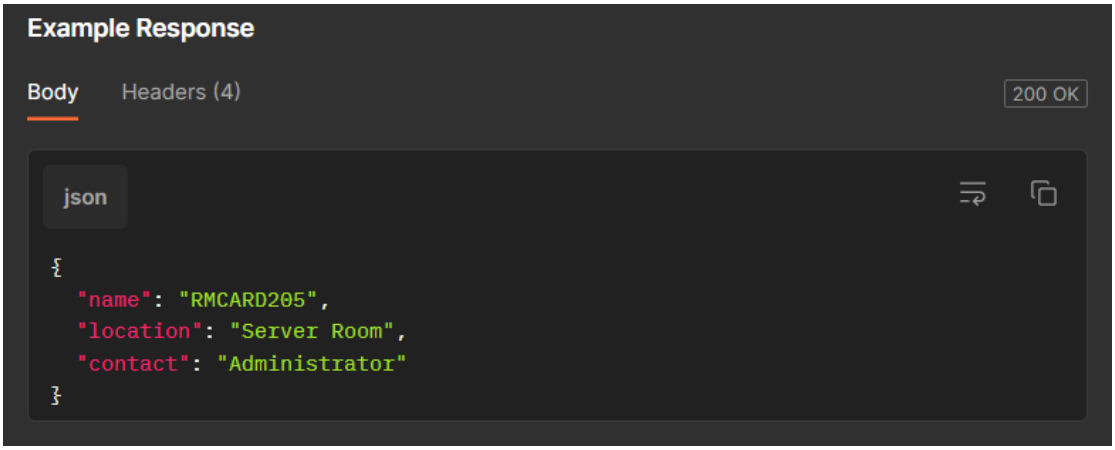
curl -v http://<IP>/api/general/ -H "Authorization: Bearer <token>"





- show ident

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



- set identification name

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

"Authorization: Bearer <token>"

The rest follows the same pattern

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

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

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

{"date":"mm/dd/yyyy"} → Ex : {"date":"11/30/2023"}

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

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

{"time":"hh:mm:ss"} → Ex : {"time":"14:32:45"}

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

curl **-X PUT** http://<IP>/api/general/datetime/timezone/ -H "Authorization: Bearer <token>"

{"timezone":"<Timezone>"} → Ex : {"timezone": "GMT +0000"}

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

curl **-X PUT** http://<IP>/api/general/datetime/ntp_use/ -H "Authorization: Bearer <token>"

{"ntp_use":"<true/false>"} → {"ntp_use":"true"}

curl **-v** http://<IP>/api/general/datetime/ntp_pri_server/ -H "token:<Token String>"

curl **-X PUT** http://<IP>/api/general/datetime/ntp_pri_server/ -H "Authorization: Bearer <token>"

{"ntp_pri_server":"<NTP Server>"} → {"ntp_pri_server":"TIME1.google.com"}

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

curl **-X PUT** http://<IP>/api/general/datetime/ntp_sec_server/ -H "Authorization: Bearer <token>"

{"ntp_sec_server":"<NTP Server>"} → {"ntp_sec_server":"TIME1.google.com"}

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

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

{"dst":"<none/tradition/manual>"} → {"dst":"none"}

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

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

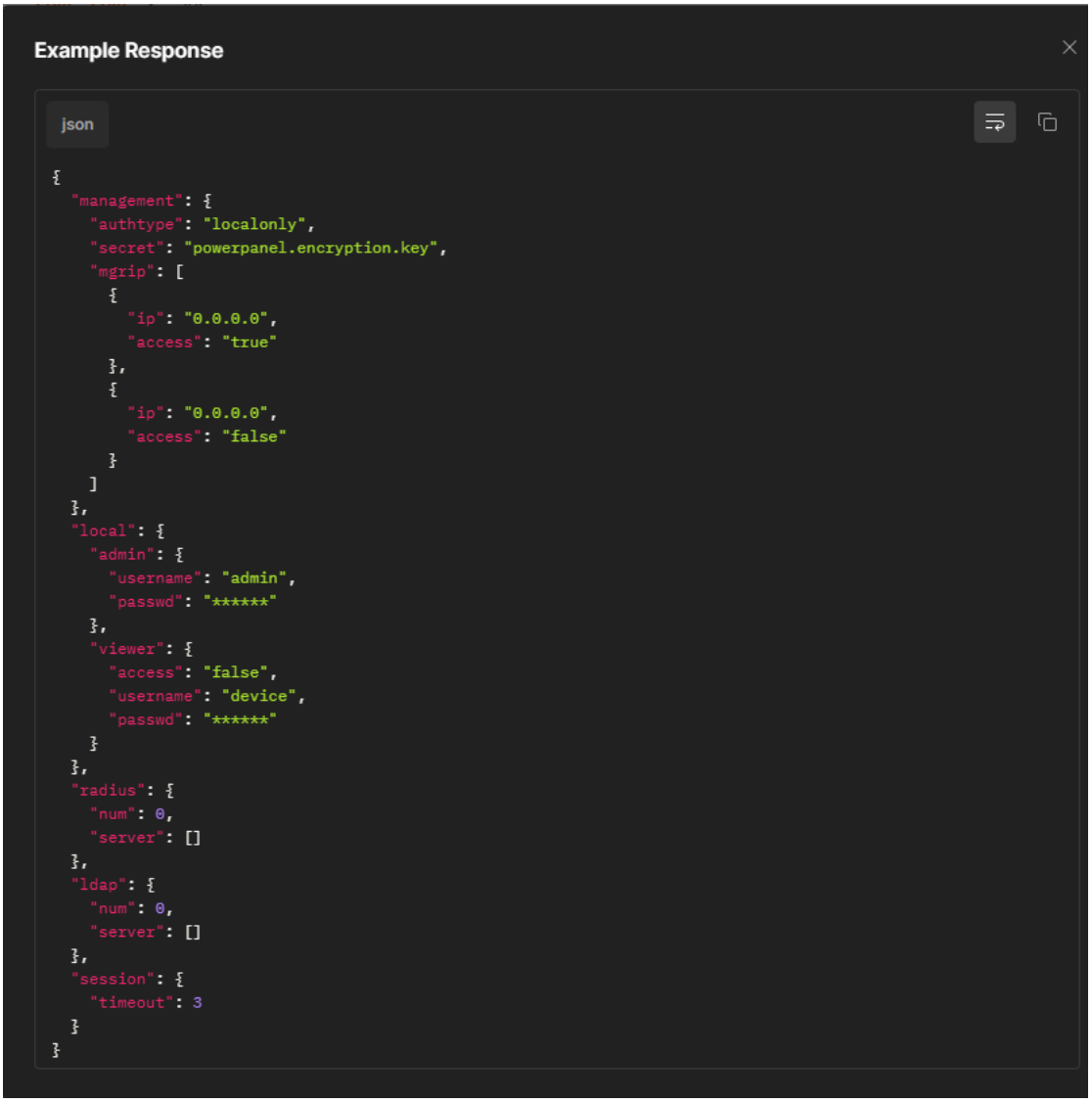
curl **-X PUT** http://<IP>/api/general/datetime/ -H "Authorization: Bearer <token>"
Ex : {"date":"11/30/2023","time":"15:56:21"}

curl **-v** http://<IP>/api/general/ident/ -H "Authorization: Bearer <token>"
curl **-v** http://<IP>/api/general/ident/name/ -H "Authorization: Bearer <token>"
curl **-X PUT** http://<IP>/api/general/ident/name/ -H "Authorization: Bearer <token>"
-d '{"name":"<Name>"} → {"name":"test_name"}'
curl **-v** http://<IP>/api/general/ident/location/ -H "Authorization: Bearer <token>"
curl **-X PUT** http://<IP>/api/general/ident/location/ -H "Authorization: Bearer <token>"
-d '{"location":"<Location>"} → {"location":"test_location"}'
curl **-v** http://<IP>/api/general/ident/contact/ -H "Authorization: Bearer <token>"
curl **-X PUT** http://<IP>/api/general/ident/contact/ -H "Authorization: Bearer <token>"
-d '{"contact":"<Contact>"} → {"contact":"test_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>"



- 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/ -d '{"authtype":" localonly"}' -H "Authorization: Bearer <token>"

⇨ "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

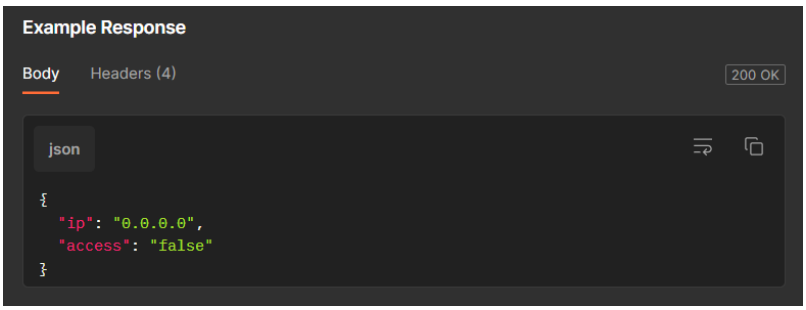
curl **-X PUT** http://<IP>/api/security/management/secret/ -d '{"secret":"<PPB Secret Phase>"}' -H "Authorization: Bearer <token>"

- Show manager IP

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

- Show secondary manager IP

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



- Set secondary manager IP

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

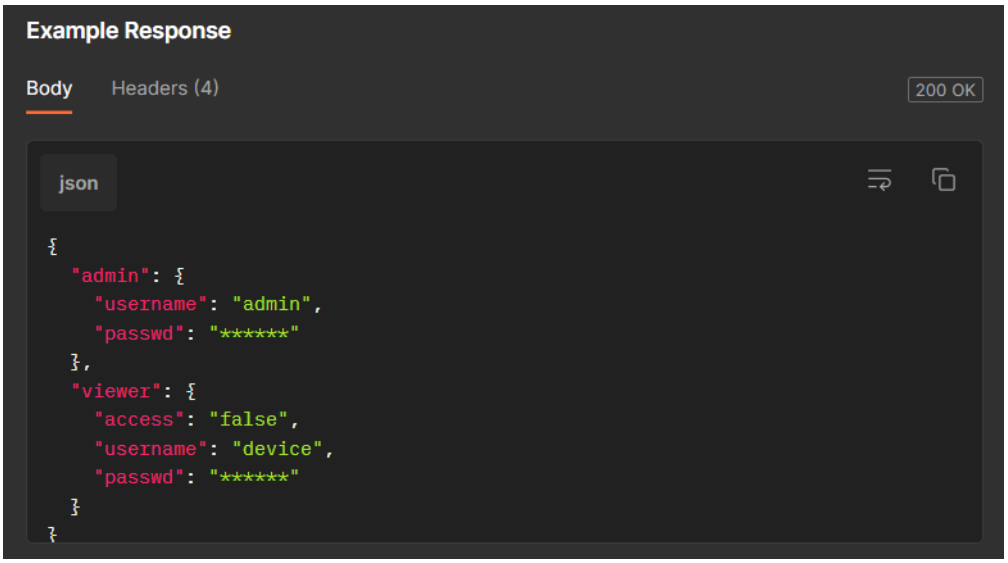
- Set manager IP by array

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

(Set primary manager IP as 192.168.202.11，Set secondary manager IP as 192.168.202.44)

- Show Local Account

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



- Show Admin Account

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

- Modify admin account

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

- Show viewer account

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

- Add viewer account

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

- Show radius server

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

- Show the number of radius server

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

- Add radius server

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

⇨ "hostname" → <STRING>

⇨ "port" → <NUMBER>

⇨ "secret" → <STRING>

⇨ "authtype" → "pap" 、"chap"

- Modify primary radius server hostname

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

- 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>"

Example Response

json


```
{
  "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",
      "groupbase": "",
      "groupattr": "",
      "groupvalue": "",
      "type": "generic",
      "addomain": ""
    }
  ]
}
```

- Add ldap server

curl **-X POST** http://<IP>/api/security/ldap/server/ -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","type": "generic"}' -H "Authorization: Bearer <token>"

⇨ "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>
⇨ "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/ -d '{"ssl":"true"}' -H "Authorization: Bearer <token>"

- Set primary ldap server userattr as uid

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

- Show primary ldap server

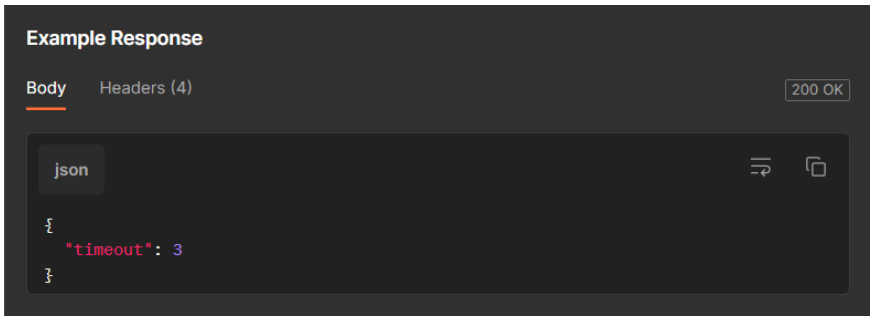
curl **-v** http://<IP>/api/security/ldap/server/1/ -H "Authorization: Bearer <token>"

- Delete primary ldap server

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

- Show information of session

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



- Set session timeout

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

5. Network

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

Example Response

json


```
{
  "ipv4": {
    "ip": "192.168.202.56",
    "subnetmask": "255.255.255.0",
    "gateway": "192.168.202.254",
    "dns": "192.168.20.125",
    "dhcp": "true",
    "dnsfromdhcp": "true",
    "hostname": "rmc05F3D3",
    "hostnamesync": "false"
  },
  "ipv6": {
    "access": "false",
    "routercontrol": "",
    "manual": "false",
    "linklocal": "",
    "manualaddr": ""
  },
  "snmpv1": {
    "access": "false",
    "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": "false",
    "user": [
      {
        "name": "cyber snmpv3 user1",
        "status": "disable",
        "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
  },
  "modbustcp": {
    "status": "offline",
    "access": "disable",
    "ip": "0.0.0.0",
    "port": 502
  }
}
```

- 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>"

- Enable IPv6 access

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

- Show SNMPv1 information

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

Example Response

json


```
{
  "access": "false",
  "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"
    }
  ]
}
```


- Enable SNMPv1 access

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

- Set SNMPv1 secondary user IP as 192.168.0.201.

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

⇨ "community" → <String>

⇨ "ip" → <String>

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

- Show SNMPv3 information

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

Example Response

json


```
{
  "access": "false",
  "user": [
    {
      "name": "cyber snmpv3 user1",
      "status": "disable",
      "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"
    }
  ]
```

- Enable SNMPv3 access

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

- Show SNMPv3 forth user imformation

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

- Set SNMPv3 forth user IP as 192.168.0.201

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

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

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

- 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/ -d '{"user":[{"ip":"192.168.0.202"},{"ip":"192.168.0.203"}]}' -H "Authorization: Bearer <token>"

⇨ "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"
    },
    {
```

- Set HTTP port as 5000

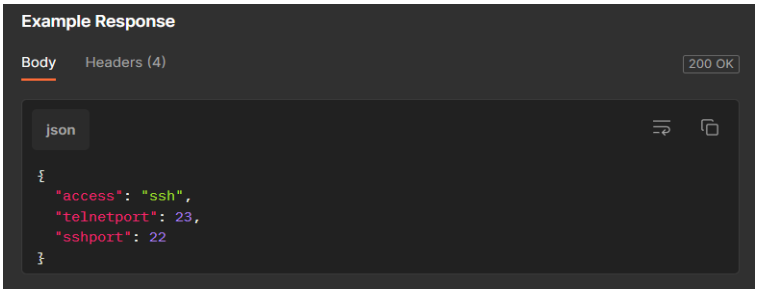
curl **-X PUT** http://<IP>/api/network/web/httpport/ -d '{"httpport":5000}' -H "Authorization: Bearer <token>"

- Disable TLS_DHE_DSS_WITH_AES_128_CBC_SHA algorithm of HTTPS

curl **-X PUT** http://<IP>/api/network/web/alg/1/ -d '{"status":"false"}' -H "Authorization: Bearer <token>"

- Show information of console

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



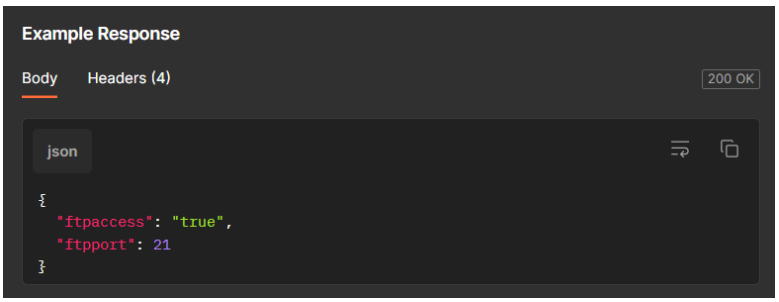
- Disable Telnet and Enable SSH

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

⇨ "access" → "disable" 、"ssh" 、"telnet"

- Show information of FTP

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



- Disable FTP

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

- Show information of Modbus TCP

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

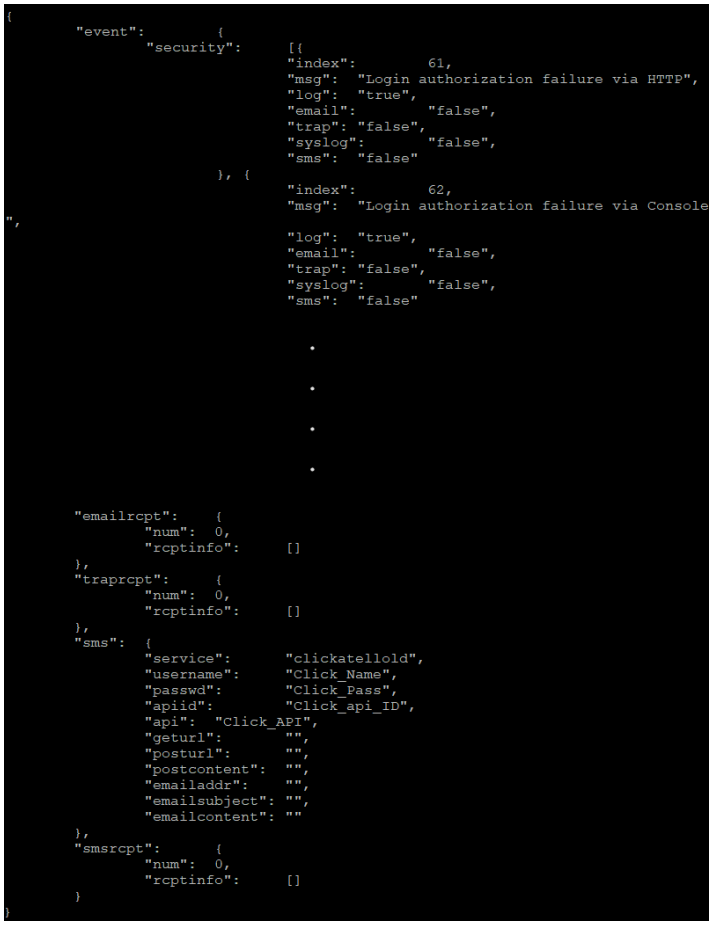
- Change Modbus TCP access status

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

⇨ "access" → "disable" 、" readonly" 、" readwrite"

6. Notification

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



- Show security event

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

Example Response

json


```
{
  "security": [
    {
      "index": 61,
      "msg": "Login authorization failure via HTTP from [IP Address]",
      "log": "true",
      "email": "false",
      "trap": "false",
      "syslog": "false",
      "sms": "false"
    },
    {
      "index": 62,
      "msg": "The password has been changed by [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": 64,
      "msg": "Configuration file uploaded by [IP Address]",
      "log": "true",
      "email": "false",
      "trap": "false",
      "syslog": "false",
      "sms": "false"
    }
  ]
```


- Enable send "Event "Login authentication failure via HTTP" via trap

curl **-X PUT** http://<IP>/api/notification/event/security/1/ -d '{"trap":"true"}' -H "Authorization: Bearer <token>"

- Enable send "Event "The password has been change" via email and syslog

curl **-X PUT** http://<IP>/api/notification/event/security/ -d '{"security": [{},{"email": "true","syslog": "true"},{},{}]}' -H "Authorization: Bearer <token>"

- Show SMTP server

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

Example Response

Body Headers (4) 200 OK

json


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

⇨ "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>"

- Add e-mail recipient

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

- Delete first e-mail recipient

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

- Disable first e-mail recipient

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

⇨ "status" → "enable" 、"disable"

⇨ "email" → <String>

- Send test message to first email recipint

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

- Show trap recipients

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

Example Response

json


```
{
  "num": 1,
  "rcptinfo": [
    {
      "name": "Trap Name1111",
      "status": "true",
      "version": 1,
      "ip": "1.1.1.1",
      "community": "public1111"
    }
  ]
}
```


- Add SNMPv1 trap receiver

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

- Add SNMPv3 trap receiver

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

- Delete first trap receiver

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

- Set first trap receiver name as "testname"

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

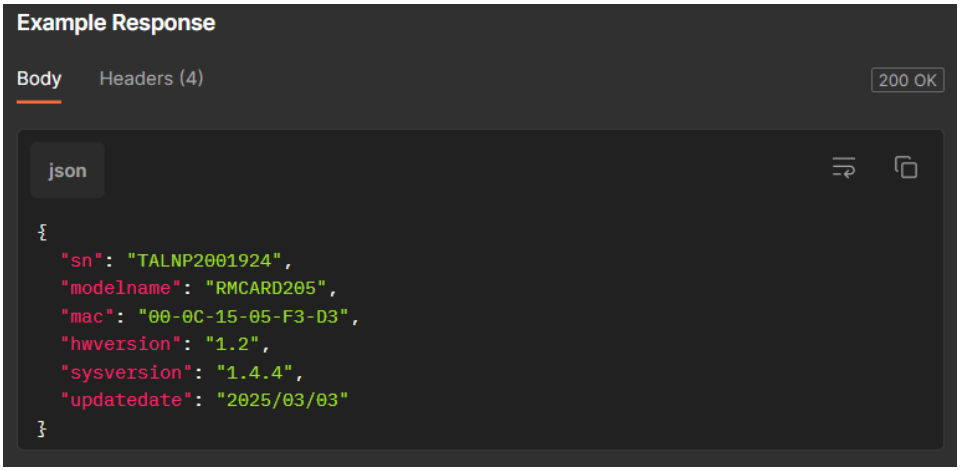
⇨ "name" → <String>
⇨ "status" → "true"、"false"
⇨ "version" → 1、3
⇨ "ip" → <String>
⇨ "community" → <String>

- Send test message to first trap receiver

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

7. System

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



- Show model name

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

- Reboot system

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

- Reset system

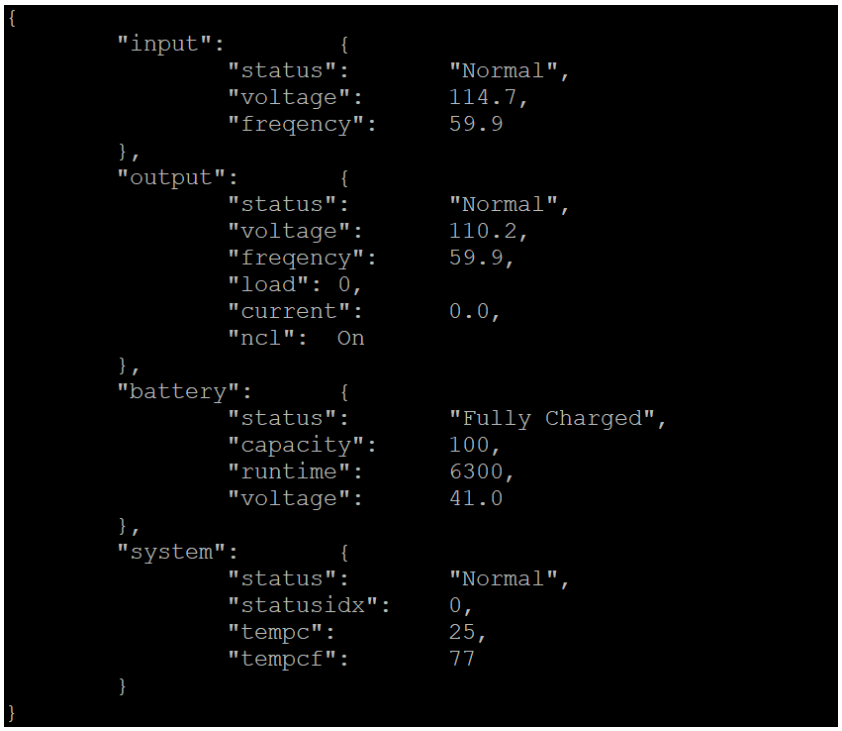
curl **-X POST** http://<IP>/api/system/reset/ -d '{"reset":"true"}' -H "Authorization: Bearer <token>"

- Reset system (TCP/IP Settings Reserved)

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

8. UPS Status

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



(1) input

- ⇨ "status" → "Over Voltage"、" Under Voltage"、" Frequency Failure"、" Blackout"、" Normal"
- ⇨ "voltage" → <Number> (V)
- ⇨ "frequency" → <Number> (Hz)

(2) output

- ⇨ "status" → "Normal"、" Boost"、" Buck"、" Over Load"、" Bypass"、" Manual Bypass"、" Bypass Overload"、" ECO Mode"、" No Output"
- ⇨ "voltage" → <Number> (V)
- ⇨ "frequency" → <Number> (Hz)
- ⇨ "load" -> <Number> (%)
- ⇨ "current" → <Number> (A)
- ⇨ "ncl" → "On"、"Off"、"None"
- ⇨ "ncl2" → "On"、"Off"、"None"

(3) battery

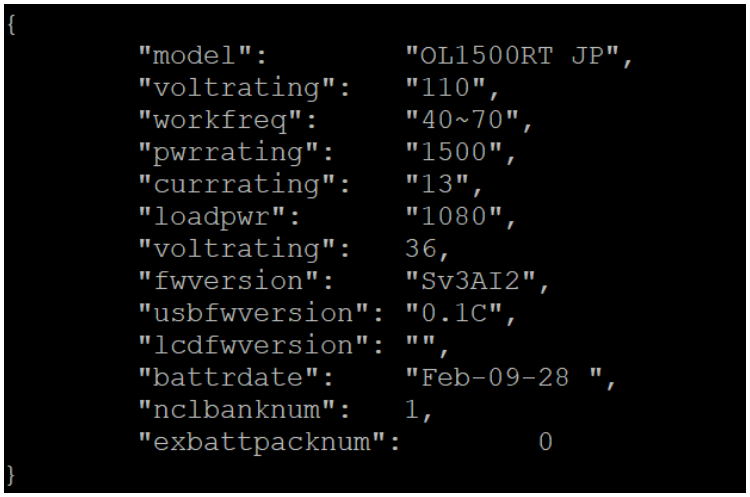
- ⇨ "status" → "Normal"、" Discharging"、" Charging"、" Fully Charged"、" Not Present"、" Battery Testing"、" Battery Critically Low"
- ⇨ "chargemode" → "sbm"、"normal"
- ⇨ "chargestate" → "discharge"、" charge"、" float"、" rest"
- ⇨ "capacity" → <Number> (%)
- ⇨ "runtime" → <Number> (s)
- ⇨ "voltage" → <Number> (V)
- ⇨ "temperature" → <Number> (C)

(4) system

- ⇨ "status" → "Normal"、" hwfailure"、" overheat"
- ⇨ "errcode" → <String> (HW Fault Error Code)
- ⇨ "tempc" → <Number> (C)
- ⇨ "tmepf" → <Number> (F)

9. UPS Information

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



- ⇨ "model" → <String>
- ⇨ "sn" → <String>
- ⇨ "voltrating" → <Number> (V)
- ⇨ "workfreq" → <Number> (Hz)
- ⇨ "pwrrating" → <Number> (V)
- ⇨ "currrating" → <Number> (A)
- ⇨ "loadpwr" → <Number> (Watt)
- ⇨ "battvoltrating" → <Number> (V)
- ⇨ "fwversion" → <String>
- ⇨ "usbversion" → <String>
- ⇨ "lcdversion" → <String>
- ⇨ "battrdate" → <String>
- ⇨ "nclbanknum" → <Number>
- ⇨ "exbattpacknum" → <Number>

10. UPS Configuration

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


```
{
        "suppliedpwr":  {
                "suppliedvolt": 110,
                "voltlist":     [100, 110, 115, 120, 125]
        },
        "pwrfailcondi": {
                "highinvthre":  150,
                "hvthrelist":   [150],
                "lowinvthre":   80,
                "lvthrelist":   [80],
                "freqtol":      7,
                "freqtollist":  [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
        },
                        .
                        .
                        .
                        .
        "battery":      {
                "lbattthre":    20,
                "lbattthrelist":        [10, 20, 30],
                "periodtest":   0
        },
        "system":       {
                "coldstart":    "true",
                "alarm":        "false",
                "dryrelaycondi":        "linefail",
                "screensaver":  0,
                "screensaverlist":      [0, 60, 300],
                "wfaultdetect": "false",
                "overdischargep":       0,
                "overdischlist":        [0, 20, 40, 60],
                "sleepclientsd":        "false"
        }
}
```


- Show supplied power of UPS configuration

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


```
{
        "suppliedvolt": 110,
        "voltlist":     [100, 110, 115, 120, 125]
}
```


- Set supplied power as 120V

curl **-X PUT** http://<IP>/api/upsconfig/suppliedpwr/ -d '{"suppliedvolt":120}' -H "Authorization: Bearer <token>"

- Show utility power failure condition of UPS configuration

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

```
{
        "highinvthre":  150,
        "hvthrelist":   [150],
        "lowinvthre":   80,
        "lvthrelist":   [80],
        "freqtol":      7,
        "freqtollist":  [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
}
```


- Set frequency tolerance as 3 Hz

curl **-X PUT** http://<IP>/api/upsconfig/pwrfailcondi/ -d '{"freqtol":3}' -H "Authorization: Bearer <token>"

⇨ "sensitivity" → "low"、" medium"、" high"

⇨ "highinvthre" → <Number> (V)

⇨ "highoutvthre" → <Number> (V)

⇨ "lowinvthre" → <Number> (V)

⇨ "lowoutvthre" → <Number> (V)

⇨ "freqtol" → <Number> (Hz)

- Show operation of UPS configuration

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


```
{
        "mode": "normal",
        "exdays":       [{
                        "day":  "sun",
                        "status":       "false"
                }, {
                        "day":  "mon",
                        "status":       "false"
                }, {
                        "day":  "tue",
                        "status":       "false"
                }, {
                        "day":  "wen",
                        "status":       "false"
                }, {
                        "day":  "thu",
                        "status":       "false"
                }, {
                        "day":  "fri",
                        "status":       "false"
                }, {
                        "day":  "sat",
                        "status":       "false"
                }],
        "exhourh":      9,
        "exhourl":      18
}
```

- Set exclusive says to enable Sunday and Monday

curl **-X PUT** http://<IP>/api/upsconfig/operation/exdays/ -d '{"exdays":[{"status":"true"},{"status":"true"}]}' -H "Authorization: Bearer <token>"

⇨ "mode" → "normal" 、" eco" 、" eco15" 、"eco10" 、" generator" 、" bypass"

⇨ "exhourh" → <Number> (0 ~ 23)

⇨ "exhourl" → <Number> (0 ~ 23)

- Show bypass of UPS configuration

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


```
{
        "bypasscondi":  "chkfreqvolt",
        "vupbound":     10,
        "vupboundlist": [10, 15],
        "vlowbound":    10,
        "vlowboundlist":        [10, 15, 20]
}
```


- Set bypass condition as "Check Volt Only"

curl **-X PUT** http://<IP>/api/upsconfig/bypass/ -d '{"bypasscondi":"chkvoltonly"}' -H "Authorization: Bearer <token>"

⇨ "bypasscondi" → "nobypass" 、" chkfreqvolt" 、" chkvoltonly"

⇨ "vupbound" → <Number>

⇨ "vlowbound" → <Number>

- Show power restore of UPS configuration

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


```
{
        "autorestore":  "true",
        "recharged":    0,
        "rechargedlist":        [0, 1, 2, 3, 5, 10, 20, 30, 60],
        "rechargecap":  0,
        "rechargecaplist":      [0, 15, 30, 45, 60, 75, 90],
        "returndelay":  0
}
```

- Set automatic restore as disable

curl **-X PUT** http://<IP>/api/upsconfig/pwrrestore/ -d '{"autorestore":"false"}' -H "Authorization: Bearer <token>"

⇨ "autorestore" → "true" 、" false"
⇨ "recharged" → <Number>
⇨ "rechargecap" → <Number>
⇨ "returndelay" → <Number> (0 ~ 600)
⇨ "lsdelay" → <Number> (0 ~ 600)

- Show battery of UPS configuration

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


```
{
        "lbattthre":    20,
        "lbattthrelist":        [10, 20, 30],
        "periodtest":   0
}
```


- Set low battery threshold as 30%

curl **-X PUT** http://<IP>/api/upsconfig/battery/ -d '{"lbattthre":30}' -H "Authorization: Bearer <token>"

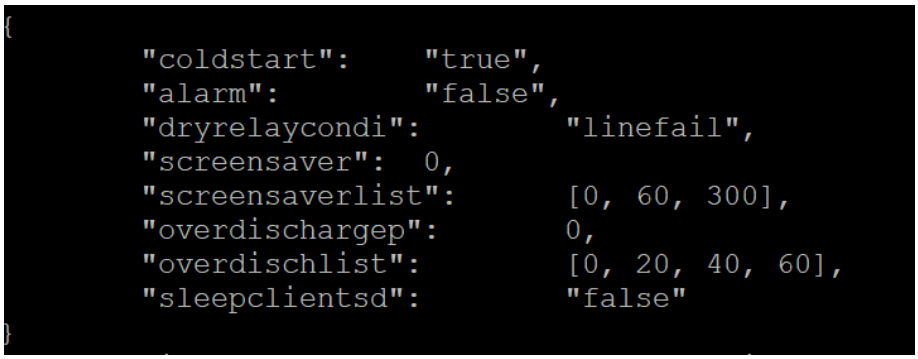
- Set periodical battery test as 2 weeks

curl **-X PUT** http://<IP>/api/upsconfig/battery/ -d '{"periodtest":20160}' -H "Authorization: Bearer <token>"

⇨ "lbattthre" → <Number>
⇨ "lbruntimethre" → <Number>
⇨ "exmod" → "auto" 、" manual"
⇨ "exbattnum" → <Number>
⇨ "packtype" → "standard" 、" customized"
⇨ "startuptest" → "true" 、"false"
⇨ "periodtest" → <Number> (min)
⇨ "chargemode" → "normal" 、" sbm"
⇨ "chargecheck" → "true" 、"false"

- Show system of UPS configuration

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



- Disable cold start

curl **-X PUT** http://<IP>/api/upsconfig/system/ -d '{"coldstart":"false"}' -H "Authorization: Bearer <token>"

⇨ "coldstart" → "true"、"false"

⇨ "alarm" → "true"、"false"

⇨ "dryrelaycondi" → "linefail"、" battlow"、" alarm"、" bypass"、" upsfail"

⇨ "screensaver" → <Number>

⇨ "wfaultdetect" → "true"、"false"

⇨ "overdischargep" → <Number>

⇨ "sleepclientsd" → "true"、"false"

11. UPS Master Switch

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

```
{
        "sddelaylist":  [0, 10, 20, 30, 60, 120, 180, 300, 600],
        "rebootdlist":  [10, 20, 30, 60, 120, 180, 300, 600],
        "sleepdlist":   [0, 10, 20, 30, 60, 120, 180, 300, 600]
}
```

- Turn on UPS

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

- Turn off UPS (Off Delay : 10sec, Sync Remote : On)

curl **-X POST** http://<IP>/api/upsswitch/ -d '{"sddelay":10,"syncppb":"true","turnoff":"true"}' -H "Authorization: Bearer <token>"

- Reboot UPS (Off Delay : 10sec, Reboot Duration : 10sec)

curl **-X POST** http://<IP>/api/upsswitch/ -d '{"rebootd":10,"sddelay":10,"reboot":"true"}' -H "Authorization: Bearer <token>"

12. UPS Bank

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

- Turn off NCL Bank (Bank 2)

curl **-X PUT** http://<IP>/api/upsbank/bank/2/ -d '{"status":"off"}' -H "Authorization: Bearer <token>"

- Set first outlet name of bank 1

curl **-X PUT** http://<IP>/api/upsbank/bank/1/outlet/1/ -d '{"name":"test_outlet_name"}' -H "Authorization: Bearer <token>"

13. UPS Diagnostics

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

- Execute the battery test

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

- Execute runtime estimation

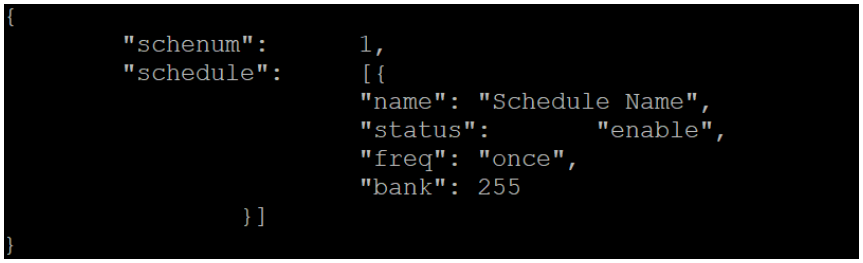
curl **-X PUT** http://<IP>/api/upsdiagno/ -d '{"esstart":"true"}'-H "Authorization: Bearer <token>"

- Abort runtime estimation

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

14. UPS Schedule

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



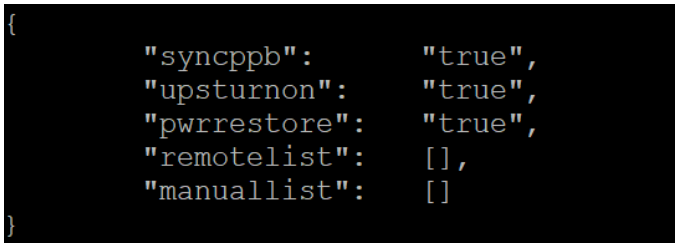
- Show first schedule

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

⇨ "name" → <String>
⇨ "status" → "enable"、"disable"
⇨ "freq" → "once"、"daily"、"weekly"
⇨ "bank" → <Number> (255->All, 1, 2, 3)
⇨ "sdyear" → <Number> (>= system year)
⇨ "sdmonth" → <Number> (1 ~ 12)
⇨ "sddate" → <Number> (1 ~ 31)
⇨ "sdweekday" → "sun"、"mon"、"tue"、"wen"、"thu"、"fri"、"sat"
⇨ "sdhour" → <Number> (0 ~ 23)
⇨ "sdmin" → <Number> (0 ~ 59)
⇨ "restoretype" → "never"、"instant"、"time"
⇨ "reyear" → <Number>
⇨ "remonth" → <Number> (1 ~ 12)
⇨ "redate" → <Number> (1 ~ 31)
⇨ "rehour" → <Number> (0 ~ 23)
⇨ "remin" → <Number> (0 ~ 59)
⇨ "restored" → "same"、"next"
⇨ "sdremote" → "true"、"false"

15. UPS Wake on lan

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

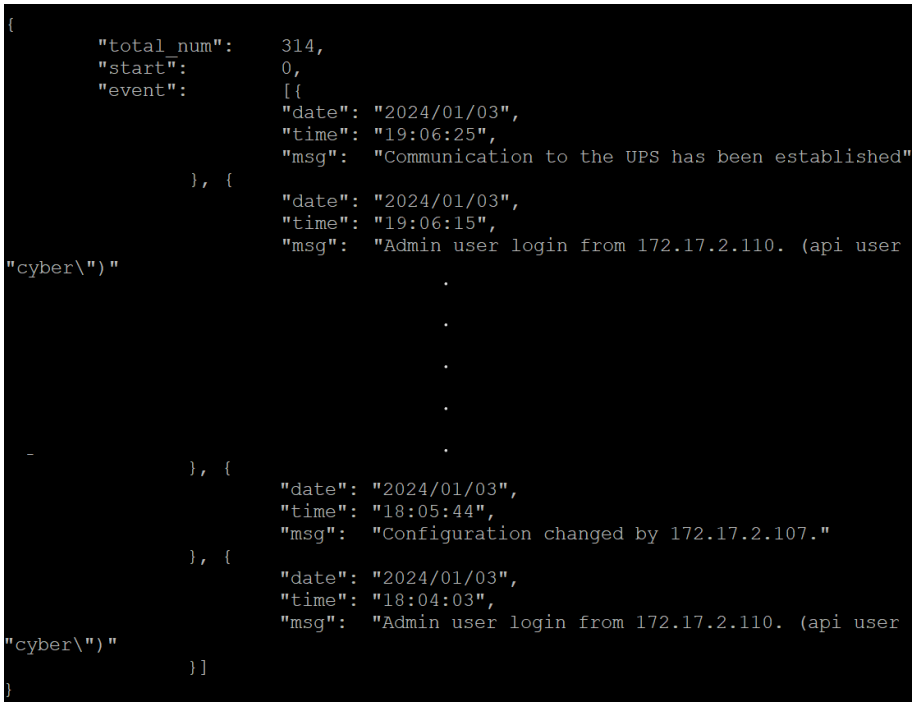


Add WoL Manual List

curl **-X POST** http://<IP>/api/upswol/ -d '{"status": "enable","ip": "192.168.20.100"}' -H "Authorization: Bearer <token>"

16. UPS Event Log

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



(Show the top 10 events)

- Show next 10 events

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

- Review events

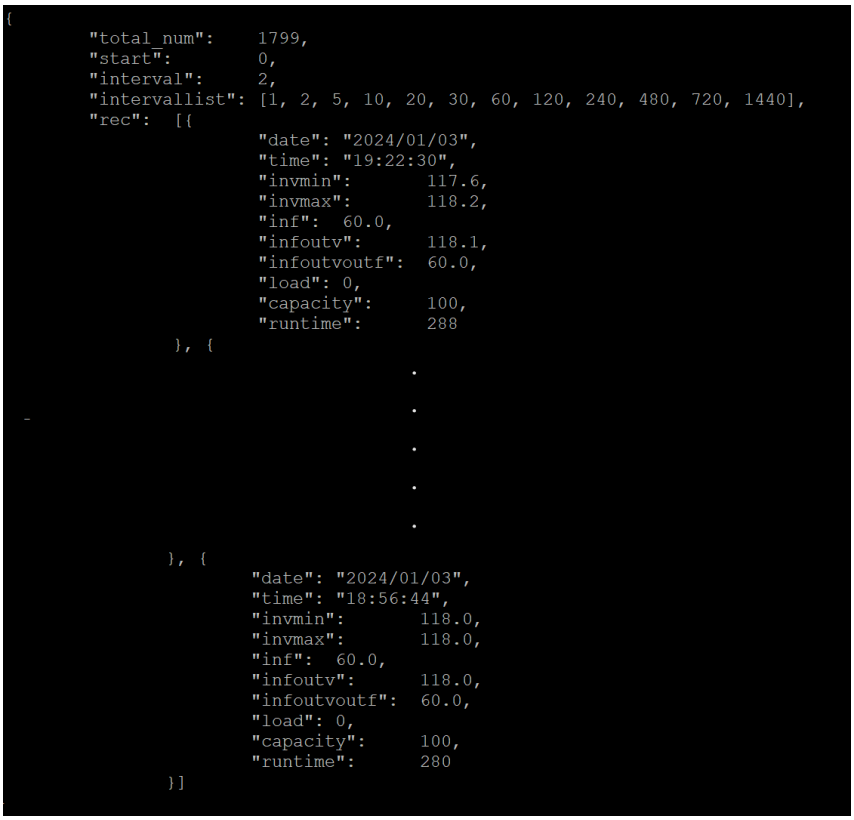
curl **-X PUT** http://<IP>/api/upsevent/event/ -d '{"review":"true"}' -H "Authorization: Bearer <token>"

- Clear all events

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

17. UPS Record Data

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



(Show the top 10 records)

- Show next 10 records

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

- Review records

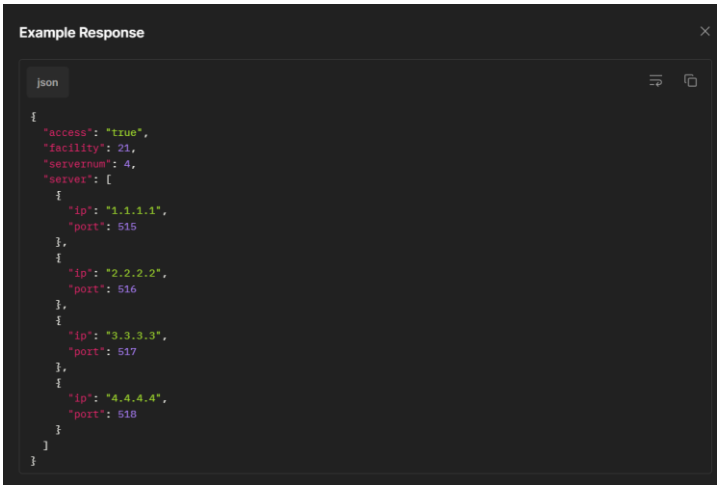
curl **-X PUT** http://<IP>/api/upsrec/rec/ -d '{"review":"true"}' -H "Authorization: Bearer <token>"

- Clear all records

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

18. Syslog

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



- Add Syslog Server

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

- Modify Syslog Server

curl **-X POST** http://<IP>/api/syslog/server/ -d ' {"access":"true","facility":21,"server":[{"ip":"1.1.1.1","port":515},{"ip":"2.2.2.2","port":516},{"ip":"3.3.3.3","port":517},{"ip":"4.4.4.4","port":518}]}' -H "Authorization: Bearer <token>"

⇨ "access" → "true", "false"

⇨ "facility" → <Number> (0 ~ 23)

⇨ "ip" → <String>

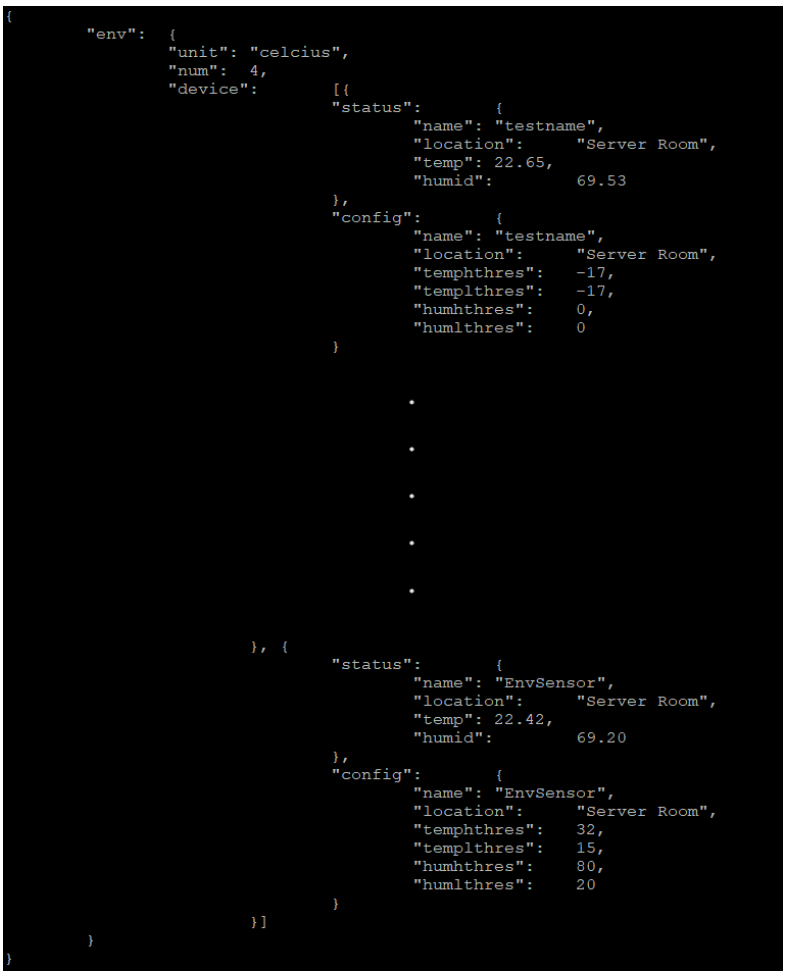
⇨ "port" → <Number>

- Delete Syslog Server

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

19. Accessory

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



- Show information of first accessory environment sensor

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

- 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/ -d '{"name":"testname"}' -H "Authorization: Bearer <token>"

- Set temperature high threshold

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

- Set accessory basic

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

- Set accessory contact

curl **-X PUT** http://<IP>/api/accessory/env/device/2/config/ -d '{"contact4name":"conname4","contact4state":"close"}' -H "Authorization: Bearer <token>"

⇨ "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"

CyberPower

CyberPower Systems, Inc.
www.cyberpowersystems.com

For USA and Canada:
4241 12th Ave East, Suite 400
Shakopee, MN 55379
Toll-free: (877) 297-6937

For all other regions:
Please visit our website for local contact information.

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