Remote Netzwerk-Karte

RMCARD400

REST-API-Handbuch

Die Remote Management Card ermöglicht die Verwaltung, Überwachung und Konfiguration eines USV-Systems und eines Umgebungssensors.

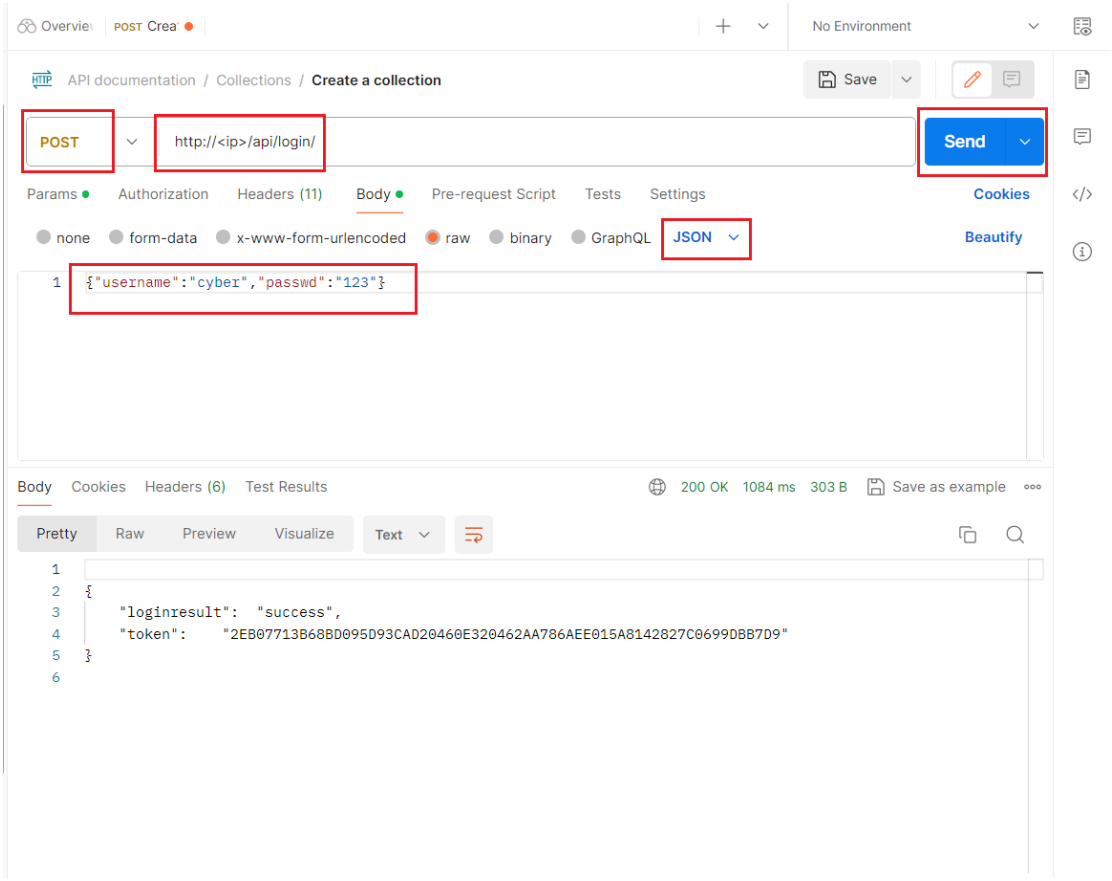
K01-E000097-00.

1. Anmeldung

curl **-X POST** http://<IP>/api/login/ -d '{"Benutzername":"<Konto>", "Kennwort":"<Kennwort>"}'


```
{
        "loginresult":  "success",
        "token":        "19130FA93D7637CB816A04C9EF4F223B40D99879E89FBC376D50B7F5520DB8CB"
}
```


Beispiel für POSTMAN



2. Abmeldung

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

3. Allgemein

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

```
cyber@ubuntu:~$ curl -v http://172.17.2.209/api/general/ -H "token:CE23DB717E25E
FD646D9848FCC4BDDC5C073D0A844D55739E804B6A802B0168A"
```


```
{
        "datetime":     {
                "date": "11/30/2023",
                "time": "10:57:47",
                "timezone":     "London",
                "ntp_use":      "false",
                "ntp_pri_server":       "0.0.0.0",
                "ntp_sec_server":       "0.0.0.0",
                "dst":  "false",
                "date_format":  "mm/dd/yyyy"
        },
        "ident":        {
                "name": "RMCARD400",
                "location":     "Server Room",
                "contact":      "Administrator"
        }
}
```


-Ident anzeigen

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


```
{
        "name": "RMCARD400",
        "location":     "Server Room",
        "contact":      "Administrator"
}
```


-Identifikationsname einstellen

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

Der Rest folgt dem gleichen Muster

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

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

curl **-X POST** http://<IP>/api/general/datetime/ date/ -H "token:<Token>"

{"Datum": "mm/tt/jjjj"} → Ex : {"Datum": "30.11.2023"}

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

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

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

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

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

{"timezone":"<City>"} → Ex : {"timezone": "London"}

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

curl **-X PUT** http://<IP>/api/general/datetime/ ntp_use/ -H "token:**<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 "token:**<Token**>"
{"ntp_pri_server":"<NTP Server>"} → {"ntp_pri_server": "TIME1.google.com"}
curl **-v** http://<IP>/api/general/datetime/ ntp_sec_server/ -H "token:**<Token**>"
curl **-X PUT** http://<IP>/api/general/datetime/ ntp_sec_server/ -H "token:**<Token**>"
{"ntp_sec_server":"<NTP Server>"} → {"ntp_sec_server": "TIME1.google.com"}
curl **-v** http://<IP>/api/general/datetime/ dst/ -H "token:**<Token**>"
curl **-X PUT** http://<IP>/api/general/datetime/ dst/ -H "token:**<Token**>"
{"dst":"<true/false>"} → {"dst": "true"}
curl **-v** http://<IP>/api/general/datetime/ date_format/ -H "token:**<Token**>"
curl **-X PUT** http://<IP>/api/general/datetime/ date_format/ -H "token:**<Token**>"
{"date_format":"<Date Format>"} → {"date_format": "jjjj/mm/dd"}

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

curl **-v** http://<IP>/api/general/ident/ -H "token:**<Token**>"
curl **-v** http://<IP>/api/general/ident/ name/ -H "token:**<Token**>"
curl **-X PUT** http://<IP>/api/general/ident/ name/ -H "token:**<Token**>"
-d '{"Name":"<Name>"} → {"name": "test_name"}'
curl **-v** http://<IP>/api/general/ident/ location/ -H "token:**<Token**>"
curl **-X PUT** http://<IP>/api/general/ident/ location/ -H "token:**<Token**>"
-d '{"Ort":"<Ort>"} → {"location": "test_location"}'
curl **-v** http://<IP>/api/general/ident/ contact/ -H "token:**<Token**>"
curl **-X PUT** http://<IP>/api/general/ident/ contact/ -H "token:**<Token**>"
-d '{"Kontakt":"<Kontakt>"} → {"contact": "test_contact"}'

curl **-X PUT** http://<IP>/api/general/ident/ -H "token:**<Token**>"
-d '{"Name": "test_name", "Ort": "test_ort", "Kontakt": "test"}'

4. Sicherheit

curl **-v** http://<IP>/api/security/ -H "token:<Token>"

- Autotyp des Systems anzeigen

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

- Autotyp des Systems festlegen

curl **-X PUT** http://<IP>/api/security/management/authtype/ -d '{"authtype":" localonly"}' -H "token:<Token>"

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

- Geheimnis der Software-Authentifizierung anzeigen

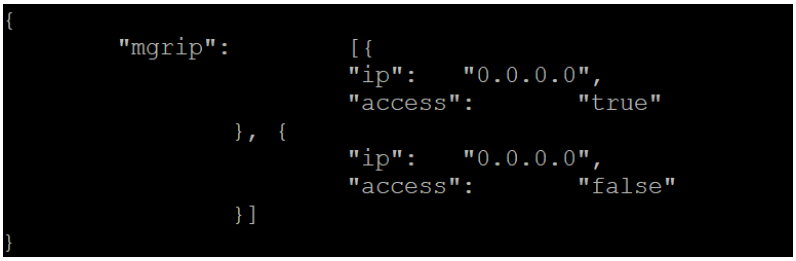
curl **-v** http://<IP>/api/security/management/secret/ -H "token:<Token>"

- Geheimnis der Software-Authentifizierung festlegen

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

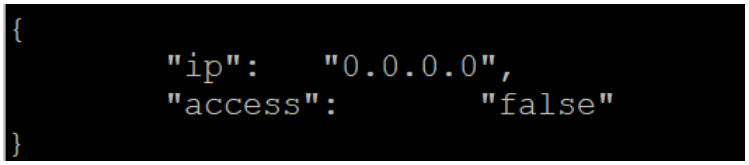
- Manager-IP anzeigen

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



- Sekundäre Manager-IP anzeigen

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



- IP des sekundären Managers einstellen

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

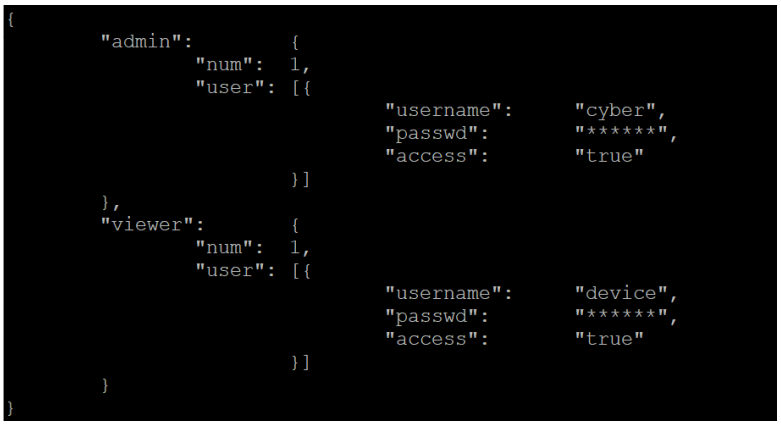
- Manager-IP durch Array festlegen

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

(Primäre Manager-IP als 192.168.202.11 einstellen, sekundäre Manager-IP als 192.168.202.44 einstellen)

- Lokales Konto anzeigen

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



- Admin-Konto anzeigen

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

- Anzeigen der Anzahl von Administratorkonten

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

- Administratorkonto hinzufügen

curl **-X POST** http://<IP>/api/security/local/admin/user/ -d '{"username": "aaa", "passwd": "aaa", "access": "true"}' -H "token:<Token>"

- Zuschauerkonto anzeigen

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

- Anzeigen der Anzahl der Zuschauerkonten

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

- Zuschauerkonto hinzufügen

curl **-X POST** http://<IP>/api/security/local/viewer/user/ -d '{"username": "bbb", "passwd": "aaa", "access": "true"}' -H "token:<Token>"

- Den Zugriff des sekundären Betrachters auf false setzen

curl **-X PUT** http://<IP>/api/security/local/viewer/user/2/ -d '{"access": "false"}' -H "token:<Token>"

- Radius-Server anzeigen

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


```
{
        "num":  1,
        "server":       [{
                        "hostname":     "192.168.0.23",
                        "secret":       "******",
                        "port": 333,
                        "authtype":     "pap"
                }]
}
```


- Anzeigen der Nummer des Radius-Servers

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

- Radius-Server hinzufügen

curl **-X POST** http://<IP>/api/security/radius/server/ -d '{"hostname": "192.168.0.62", "port":1812, "secret": "test", "authtype": "pap"}' -H "token:<Token>"

⇨ "Hostname"→ <STRING>
⇨ "Hafen"→ <NUMMER>
⇨ "geheim"→ <STRING>
⇨ "authtype"→ "pap" 、"chap"

- Ändern des Hostnamens des primären Radius-Servers

curl **-X PUT** http://<IP>/api/security/radius/server/1/ -d '{"hostname": "192.168.0.111"}' -H "token:<Token>"

- Primären Radius-Server löschen

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

- ldap-Server anzeigen

curl **-v** http://<IP>/api/security/ldap/ -H "token:<Token>"


```
{
        "num":  1,
        "server":       [{
                        "hostname":     "192.168.202.33",
                        "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":     ""
                }]
}
```


- ldap-Server hinzufügen

curl **-X POST** http://<IP>/api/security/ldap/server/ -d '{"type": "generic", "hostname": "192.168.202.33", "basedn": "dc=cyber,dc=com", "userattr": "cn", "port":389, "ssl": "false", "auth_n_mode": "anonymous", "auth_z_mode": "byattr", "adminattr": "description", "adminvalue": "cyber_admin"}' -H "token:<Token>"

⇨ "Typ"→ "generisch" 、"Anzeige"

⇨ "Hostname"→ <STRING>

⇨ "basedn"→ <STRING>

⇨ "userattr"→ <STRING>

⇨ "Hafen"→ <NUMMER>

⇨ "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>

⇨ "Gruppenwert"→ <STRING>

- Primärer ldap-Server SSL auf true setzen

curl **-X POST** http://<IP>/api/security/ldap/server/1/ -d '{"ssl": "true"}' -H "token:<Token>"

- Primärer ldap-Server userattr als uid festlegen

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

- Primären ldap-Server anzeigen

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

- Primären ldap-Server löschen

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

- Informationen zur Sitzung anzeigen

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


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


- Sitzungs-Timeout einstellen

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

- Informationen zu 802.1x anzeigen

curl **-v** http://<IP>/api/security/dot1x/ -H "token:<Token>"


```
{
        "access":       "false",
        "ident":        "",
        "keypasswd":    "",
        "castatus":     "none",
        "certstatus":   "none",
        "keystatus":    "none"
}
```

- 802.1x aktivieren

curl **-X PUT** http://<IP>/api/security/dot1x/ -d '{"access": "true"}' -H "token:<Token>"

- CA-Zertifikat von 802.1x hochladen

curl **-F upfile=@<CA-Datei>** http://<IP>/api/security/dot1x/upload/ca/ -H "token:<Token>"

- Zertifikat von 802.1x hochladen

curl **-F upfile=@<Zertifikatsdatei>** http://<IP>/api/security/dot1x/upload/cert/ -H "token:<Token>"

⇨ "Typ"→ "generisch" 、"Anzeige"

- Privaten Schlüssel von 802.1x hochladen

curl **-F upfile=@<Schlüsseldatei>** http://<IP>/api/security/dot1x/upload/key/ -H "token:<Token>"

- CA-Zertifikat von 802.1x löschen

curl **-X DELETE** http://<IP>/api/security/dot1x/ -d '{"delca": "true"}' -H "token:<Token>"

- Zertifikat von 802.1x löschen

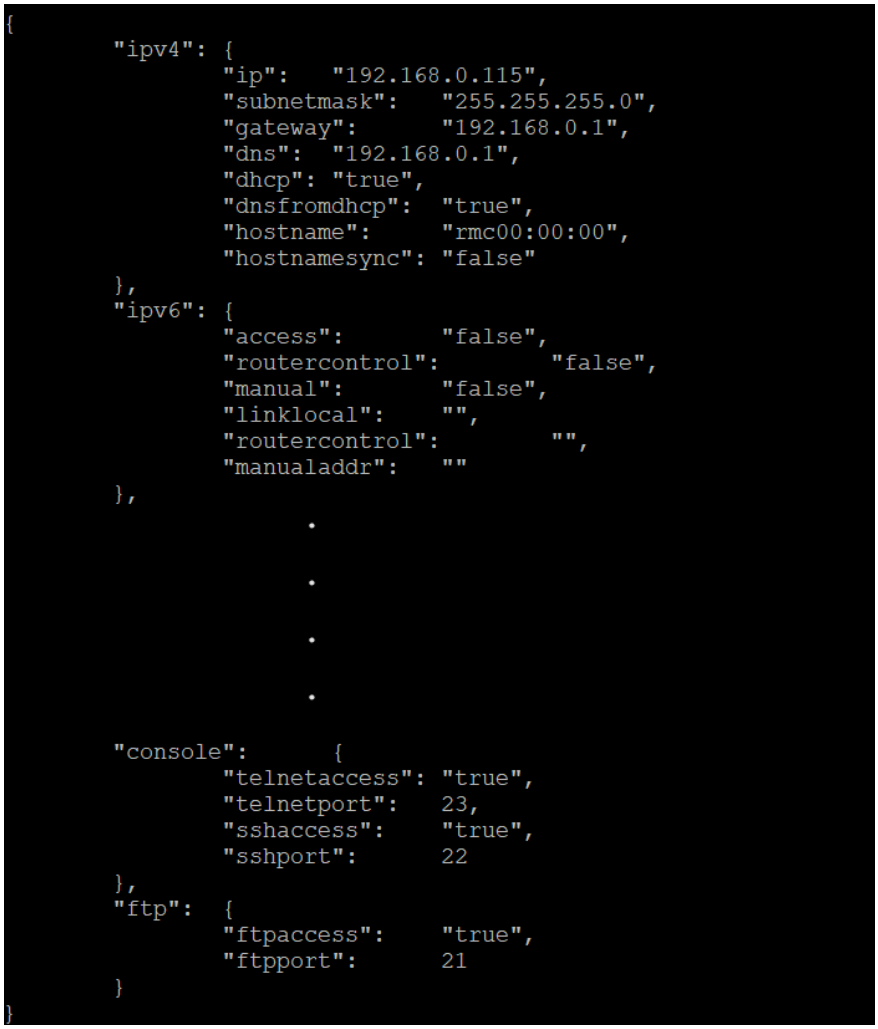
curl **-X DELETE** http://<IP>/api/security/dot1x/ -d '{"delcert": "true"}' -H "token:<Token>"

- Privaten Schlüssel von 802.1x löschen

curl **-X DELETE** http://<IP>/api/security/dot1x/ -d '{"delkey": "true"}' -H "token:<Token>"

5. Netzwerk

curl **-v** http://<IP>/api/network/ -H "token:<Token>"



- IPv4-IP-Adresse anzeigen

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

- IPv4 DHCP anzeigen

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

- IPv4 DHCP einstellen

curl **-X PUT** http://<IP>/api/network/ipv4/dhcp/ -d '{"dhcp": "false"}' -H "token:<Token>"

- IPv6-Zugang aktivieren

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

- SNMPv1-Informationen anzeigen

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

- Aktivieren Sie den SNMPv1-Zugang

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

- Setzen Sie die sekundäre SNMPv1-Benutzer-IP auf 192.168.0.201.

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

⇨ "Community “→ <String>

⇨ "ip"→ <String>

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

- SNMPv3-Informationen anzeigen

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

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


- Aktivieren Sie den SNMPv3-Zugang

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

- Vierte SNMPv3-Benutzerinformationen anzeigen

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

- SNMPv3 vierte Benutzer-IP als 192.168.0.201 festlegen

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

- Setzen Sie das sekundäre SNMPv3-Snmp-Benutzerauthentifizierungsprotokoll auf md5 und das Authentifizierungspasswort auf 1111111111111111.

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

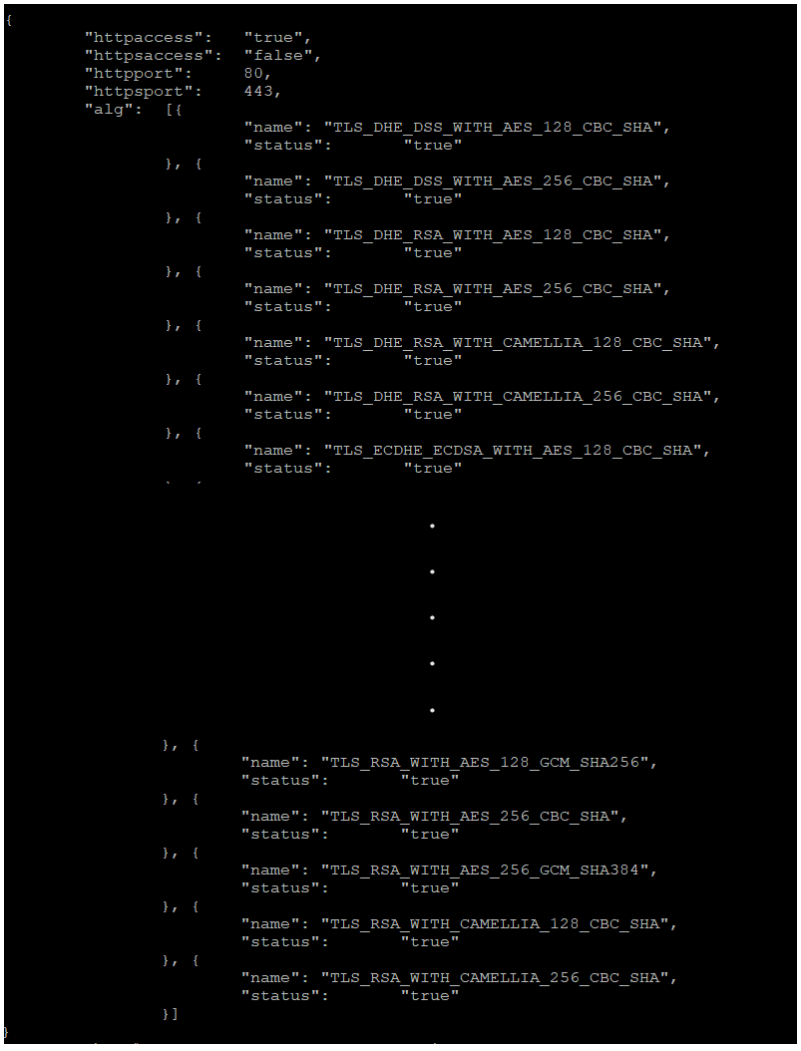
- SNMPv3 primäre snmp Benutzer-IP als 192.168.0.202 und sekundäre snmp Benutzer-IP als 192.168.0.203 einstellen

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

⇨ "Name"→ <String>
⇨ "Status"→ "aktivieren" 、"deaktivieren"
⇨ "authprotocol"→ "md5" 、"sha"
⇨ "authpasswd"→ <String>
⇨ "privprotocol"→ "des" 、"aes"
⇨ "privpasswd"→ <String>
⇨ "ip"→ <String>

- Informationen über das Web anzeigen

curl **-v** http://<IP>/api/network/web/ -H "token:<Token>"



- HTTP-Port auf 5000 einstellen

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

- Deaktivieren des TLS_DHE_DSS_WITH_AES_128_CBC_SHA-Algorithmus von HTTPS

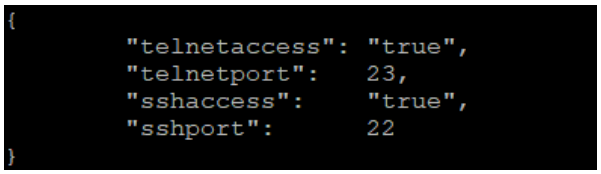
curl **-X PUT** http://<IP>/api/network/web/alg/1/ -d '{"status": "false"}' -H "token:**<Token**>"

- HTTPS-Zertifizierung hochladen

curl **-F upfile=@<Zertifikatsdatei>** http://<IP>/api/network/web/https/upload/cert/ -H "token:**<Token**>"

- Informationen der Konsole anzeigen

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



- Telnet deaktivieren

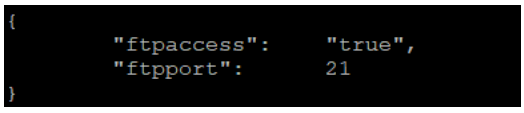
curl **-X PUT** http://<IP>/api/network/console/ -d '{"telnetaccess": "false"}' -H "token:**<Token**>"

- SSH-Hostschlüssel hochladen

curl -F **upfile=@<Hostkey-Datei>** http://<IP>/api/network/console/upload/hostkey/ -H "token:**<Token**>"

- Informationen über FTP anzeigen

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



- FTP deaktivieren

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

6. Benachrichtigung

curl -v http://<IP>/api/notification/ -H "token:<Token>"


```
{
        "event":        {
                "security":     [{
                                "index":        61,
                                "msg":  "Login authorization failure via HTTP",
                                "log":  "true",
                                "email":        "false",
                                "trap": "false",
                                "syslog":       "false",
                                "sms":  "false"
                        }, {
                                "index":        62,
                                "msg":  "Login authorization failure via Console
",
                                "log":  "true",
                                "email":        "false",
                                "trap": "false",
                                "syslog":       "false",
                                "sms":  "false"

                                  .

                                  .

                                  .

                                  .


        "emailrcpt":    {
                "num":  0,
                "rcptinfo":     []
        },
        "traprcpt":     {
                "num":  0,
                "rcptinfo":     []
        },
        "sms":  {
                "service":      "clickatellold",
                "username":     "Click_Name",
                "passwd":       "Click_Pass",
                "apiid":        "Click_api_ID",
                "api":  "Click_API",
                "geturl":       "",
                "posturl":      "",
                "postcontent":  "",
                "emailaddr":    "",
                "emailsubject": "",
                "emailcontent": ""
        },
        "smsrcpt":      {
                "num":  0,
                "rcptinfo":     []
        }
}
```


- Sicherheitsereignis anzeigen

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


```
{
        "security":     [{
                        "index":        61,
                        "msg":  "Login authorization failure via HTTP",
                        "log":  "true",
                        "email":        "false",
                        "trap": "false",
                        "syslog":       "false",
                        "sms":  "false"
                }, {
                        "index":        62,
                        "msg":  "Login authorization failure via Console",
                        "log":  "true",
                        "email":        "false",
                        "trap": "false",
                        "syslog":       "false",
                        "sms":  "false"
                }, {
                        "index":        63,
                        "msg":  "The password has been changed",
                        "log":  "true",
                        "email":        "false",
                        "trap": "false",
                        "syslog":       "false",
                        "sms":  "false"
                }, {
                        "index":        64,
                        "msg":  "Configuration file uploaded",
                        "log":  "true",
                        "email":        "false",
                        "trap": "false",
                        "syslog":       "false",
                        "sms":  "false"
                }]
}
```

- Aktivieren Sie das Senden des Ereignisses "Login-Authentifizierungsfehler über HTTP" per Trap

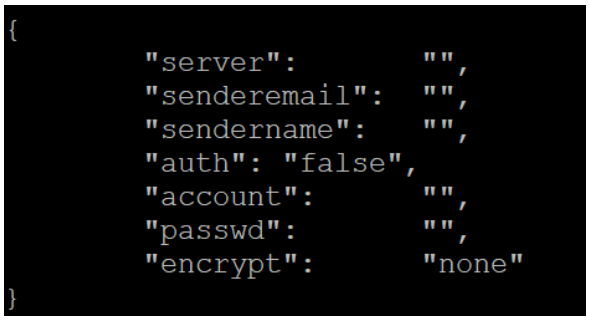
curl **-X PUT** http://<IP>/api/notification/event/security/1/ -d '{"trap": "true"}' -H "token:<Token>"

- Aktivieren Sie das Senden des Ereignisses "Das Passwort wurde geändert" per E-Mail und Syslog

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

- SMTP-Server anzeigen

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



- SMTP-Server einstellen

curl **-X PUT** http://<IP>/api/notification/smtp/ -d '{"server": "smtp-mail.outlook.com"}' -H "token:<Token>"

⇨ "Server"→ <String>
⇨ "senderemail"→ <String>
⇨ "Absendername"→ <String>
⇨ "auth"→ "true" 、"false"
⇨ "Konto"→ <String>
⇨ "passwd"→ <String>
⇨ "verschlüsseln"→ "keine" 、"tls" 、"ssl"

- E-Mail-Empfänger anzeigen

curl **-v** http://<IP>/api/notification/emailrcpt/ -H "token:<Token>"

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


- E-Mail-Empfänger hinzufügen

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

- Ersten E-Mail-Empfänger löschen

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

- Ersten E-Mail-Empfänger deaktivieren

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

⇨ "Status"→ "aktivieren" 、"deaktivieren"

⇨ "E-Mail"→ <String>

- Testnachricht an den ersten E-Mail-Empfänger senden

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

- Trap-Empfänger anzeigen

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


```
{
        "num":  1,
        "rcptinfo":     [{
                        "name": "Trap Name",
                        "status":       "true",
                        "version":      1,
                        "ip":   "192.168.0.205",
                        "community":    "public"
                }]
}
```


- SNMPv1-Trap-Empfänger hinzufügen

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

- SNMPv3-Trap-Empfänger hinzufügen

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 "token:<Token>"

- Ersten Trap-Empfänger löschen

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

- Ersten Trap-Empfängernamen als "Testname" festlegen

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

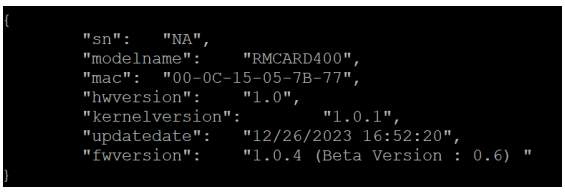
⇨ "Name"→ <String>
⇨ "status"→ "true" 、"false"
⇨ "Version"→ 1、3
⇨ "ip"→ <String>
⇨ "Community "→ <String>

- Testnachricht an den ersten Trap-Empfänger senden

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

7. System

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



- Modellname anzeigen

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

- System neu starten

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

- System zurücksetzen

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

- System zurücksetzen (TCP/IP-Einstellungen reserviert)

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

- Konfigurationsdatei zur Wiederherstellung hochladen

curl **-F upfile=@<Wiederherstellungsdatei>** http://<IP>/api/system/restore/upload/ -H "token:**<Token**>"

- Speichern der Konfigurationsdatei herunterladen

curl http://<IP>/api/system/restore/download/ --output **<Dateiname>** -H "token:**<Token**>"

- Datei mit Diagnoseinformationen herunterladen

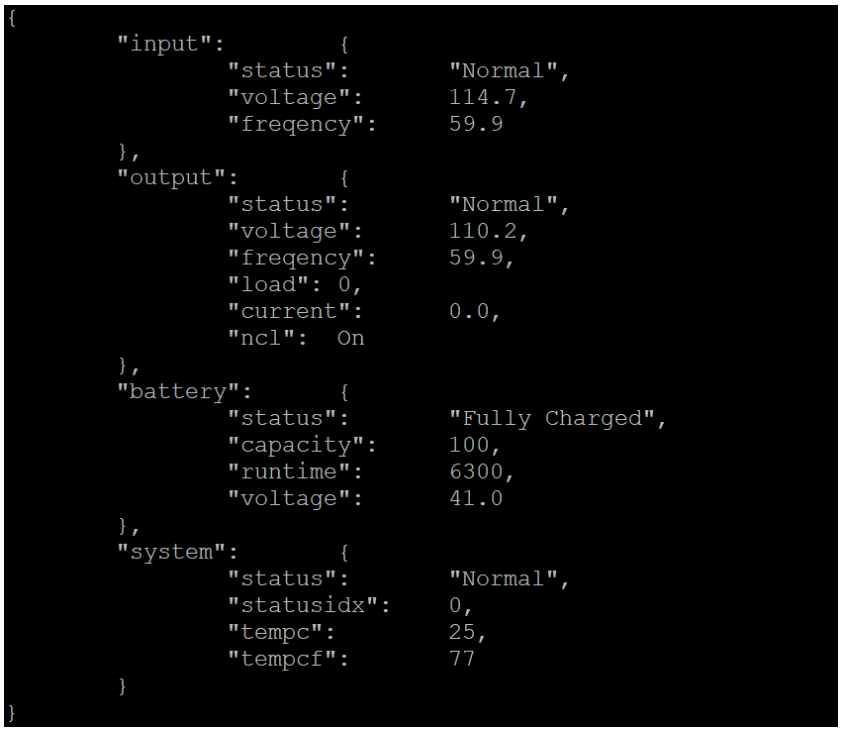
curl http://<IP>/api/system/diagnoinfo/download/ --output **<Dateiname herunterladen>** -H "token:**<Token**>"

- Aktualisierung der Firmware

curl **-F upfile=@<FW-Datei>** http://<IP>/api/system/firmware/upload/ -H "token:**<Token**>"

8. UPS Status

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



(1) Eingabe

⇨ "status"→ "Überspannung" 、" Unterspannung" 、" Frequenz-Ausfall" 、" Stromausfall" 、" Normal"

⇨ "voltage"→ <Zahl> (V)

⇨ "frequenz"→ <Zahl> (Hz)

(2) Ausgabe

⇨ "Status"→ "Normal" 、" Boost" 、" Buck" 、" Überlast" 、" Bypass" 、" Manuelle Umgehung" 、" Bypass Überlast" 、" ECO-Modus" 、" Kein Ausgang"

⇨ " voltage "→ <Zahl> (V)

⇨ " frequenz "→ <Zahl> (Hz)

⇨ "Last" -> <Zahl> (%)

⇨ "aktuell"→ <Zahl> (A)

⇨ "ncl"→ "Ein" 、"Aus" 、"Keine"

⇨ "ncl2"→ "Ein" 、"Aus" 、"Keine"

(3) Batterie

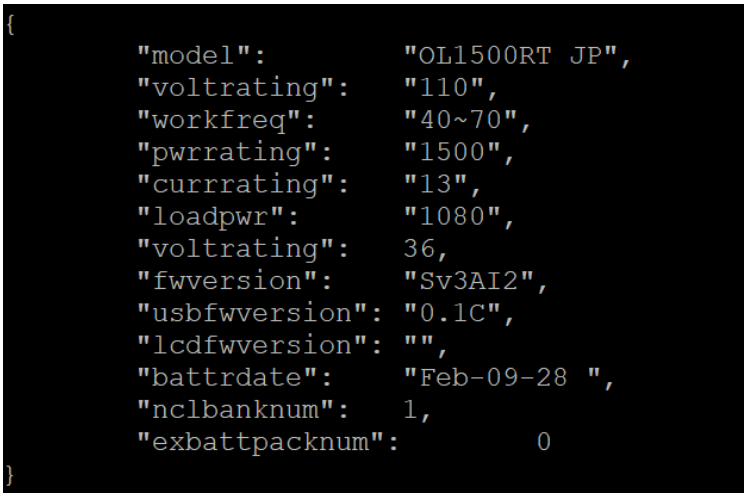
- ⇨ "Status"→ "Normal"、" Entladend"、" Aufladen"、" Vollständig aufgeladen"、" Nicht vorhanden"、" Batterieprüfung"、" Batterie kritisch niedrig"
- ⇨ "Lademodus"→ "sbm"、"normal"
- ⇨ "chargestate"→ "discharge"、" charge"、" float"、" rest"
- ⇨ "Kapazität"→ <Zahl> (%)
- ⇨ "Laufzeit"→ <Zahl> (s)
- ⇨ "Spannung"→ <Zahl> (V)
- ⇨ "Temperatur"→ <Zahl> (C)

(4) System

- ⇨ "status"→ "Normal"、" hwfailure"、" overheat"
- ⇨ "errcode"→ <String> (HW-Fehler-Fehlercode)
- ⇨ "tempc"→ <Zahl> (C)
- ⇨ "tmepf"→ <Nummer> (F)

9. UPS Informationen

curl **-v** http://<IP>/api/upsinfo/ -H "token:<Token>"



- ⇨ "Modell"→ <String>
- ⇨ "sn"→ <String>
- ⇨ "voltrating"→ <Zahl> (V)
- ⇨ "workfreq"→ <Zahl> (Hz)
- ⇨ "pwrrating"→ <Zahl> (V)
- ⇨ "currating"→ <Zahl> (A)
- ⇨ "loadpwr"→ <Zahl> (Watt)
- ⇨ "voltrating"→ <Zahl> (V)
- ⇨ "fwversion"→ <String>
- ⇨ "usbversion"→ <String>
- ⇨ "lcdversion"→ <String>
- ⇨ "battrdate"→ <String>
- ⇨ "nclbanknum"→ <Zahl>
- ⇨ "exbattpacknum"→ <Nummer>

10. USV-Konfiguration

curl **-v** http://<IP>/api/upsconfig/ -H "token:<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"
        }
}
```


- Anzeige der gelieferten Leistung der UPS-Konfiguration

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


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


- Stellen Sie die Versorgungsspannung auf 120 V ein.

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

- Anzeige der Netzausfallbedingung der UPS-Konfiguration

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

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


- Frequenztoleranz auf 3 Hz einstellen

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

⇨ "Empfindlichkeit"→ "niedrig"、" mittel"、" hoch"

⇨ "highinvthre"→ <Zahl> (V)

⇨ "highoutvthre"→ <Zahl> (V)

⇨ "lowinvthre"→ <Zahl> (V)

⇨ "lowoutvthre"→ <Zahl> (V)

⇨ "freqtol"→ <Zahl> (Hz)

- Betrieb der USV-Konfiguration anzeigen

curl **-v** http://<IP>/api/upsconfig/ suppliedpwr/operation/ -H "token:<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
}
```

- Legen Sie exklusiv fest, dass Sonntag und Montag aktiviert werden sollen.

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

⇨ "Modus"→ "normal"、" ecov"、" eco15"、"eco10"、" generator"、" bypass"

⇨ "exhourh"→ <Zahl> (0 ~ 23)

⇨ "exhourl"→ <Zahl> (0 ~ 23)

- Bypass der USV-Konfiguration anzeigen

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


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


- Bypass-Bedingung als "Nur Prüfspannung" einstellen

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

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

⇨ "vupbound"→ <Nummer>

⇨ "vlowbound"→ <Nummer>

- Wiederherstellung der Stromversorgung der USV-Konfiguration anzeigen

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

- Automatische Wiederherstellung deaktivieren

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

⇨ "autorestore"→ "true" 、" false"
⇨ "wieder aufgeladen"→ <Nummer>
⇨ "rechargecap"→ <Nummer>
⇨ "returndelay"→ <Zahl> (0 ~ 600)
⇨ "lsdelay"→ <Zahl> (0 ~ 600)

- Batterie der USV-Konfiguration anzeigen

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


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


- Schwellenwert für niedrigen Batteriestand auf 30 % einstellen

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

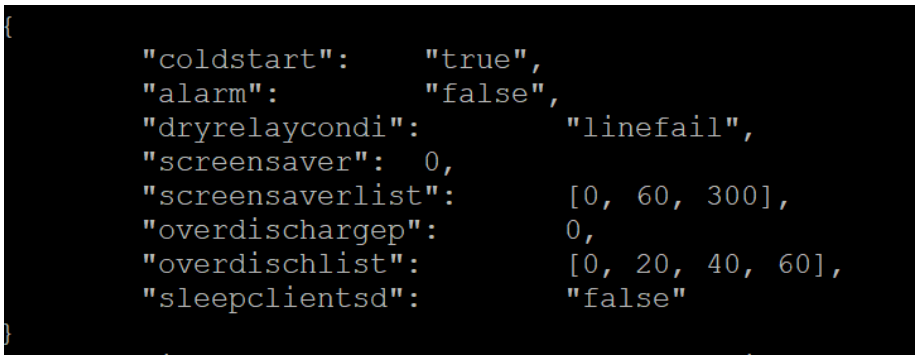
- Regelmäßiger Batterietest auf 2 Wochen einstellen

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

⇨ "lbattthre"→ <Nummer>
⇨ "lbruntimethre"→ <Nummer>
⇨ "exmod"→ "auto" 、" manuell"
⇨ "exbattnum"→ <Nummer>
⇨ "packtype"→ "standard" 、" customized"
⇨ "startuptest"→ "true" 、"false"
⇨ "Zeitraumtest"→ <Zahl> (min)
⇨ "chargemode"→ "normal" 、" sbm"
⇨ "chargecheck"→ "true" 、"false"

- System der USV-Konfiguration anzeigen

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



- Kaltstart deaktivieren

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

⇨ "coldstart"→ "true" 、"false"

⇨ "alarm"→ "true" 、"false"

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

⇨ "screensaver"→ <Nummer>

⇨ "overdischargep"→ "true" 、"false"

⇨ "overdischlist"→ <Nummer>

⇨ "sleepclientsd"→ "true" 、"false"

11. UPS Hauptschalter

curl **-v** http://<IP>/api/upsswitch/ -H "token:<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]
}
```

- UPS einschalten

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

- USV ausschalten (Ausschaltverzögerung: 10s, Sync Remote: Ein)

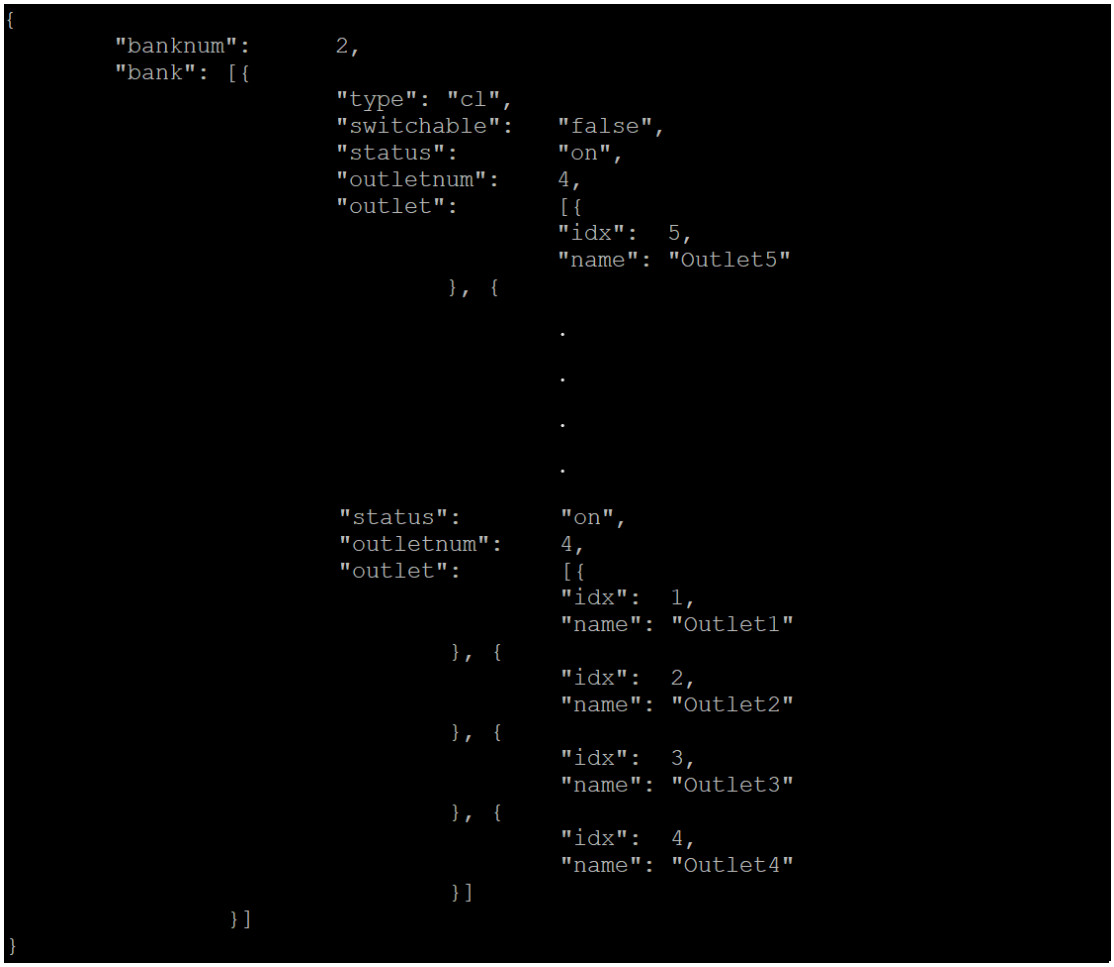
curl **-X POST** http://<IP>/api/upsswitch/ -d '{"sddelay":10, "syncppb": "true", "turnoff": "true"}' -H "token:<Token>"

- Neustart der USV (Aus-Verzögerung: 10 Sekunden, Neustartdauer: 10 Sekunden)

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

12. UPS Bank

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



- NCL-Bank ausschalten (Bank 2)

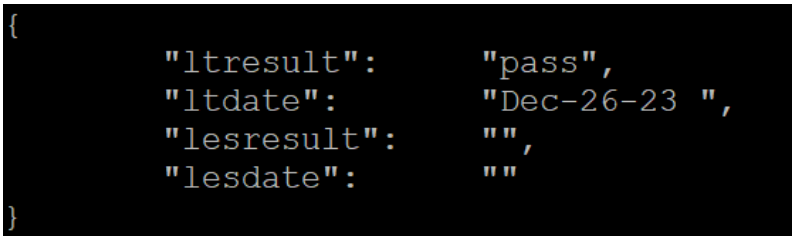
curl **-X PUT** http://<IP>/api/upsbank/bank/2/ -d '{"status": "off"}' -H "token:<Token>"

- Ersten Ausgangsnamen von Bank 1 einstellen

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

13. UPS-Diagnose

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



- Führen Sie den Batterietest durch

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

- Laufzeit-Schätzung durchführen

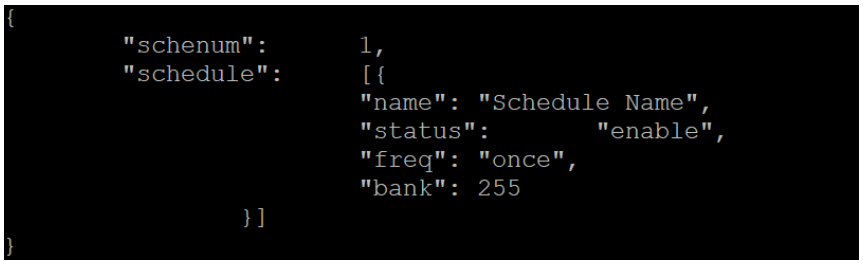
curl **-X PUT** http://<IP>/api/upsdiagno/ -d '{"esstart": "true"}'-H "token:<Token>"

- Abbruch der Laufzeitabschätzung

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

14. UPS Zeitplan

curl **-v** http://<IP>/api/upssche/ -H "token:**<Token**>"

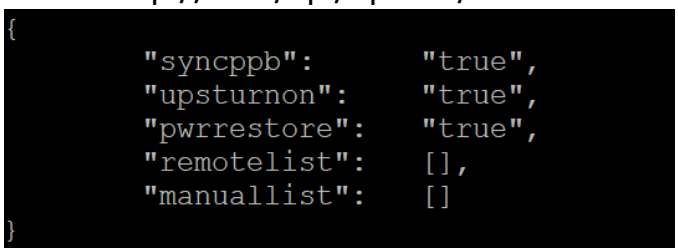


- Ersten Zeitplan anzeigen

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

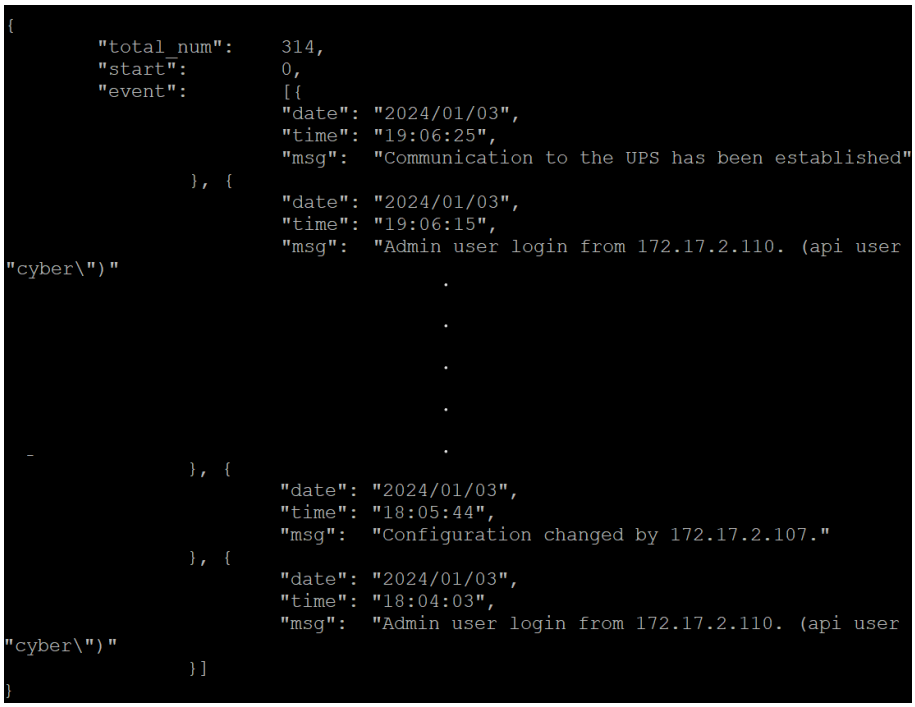
15. UPS Wake on lan

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



16. UPS Ereignisprotokoll

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



(Anzeige der 10 wichtigsten Ereignisse)

- Nächste 10 Ereignisse anzeigen

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

- Rückblick auf Veranstaltungen

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

- Alle Ereignisse löschen

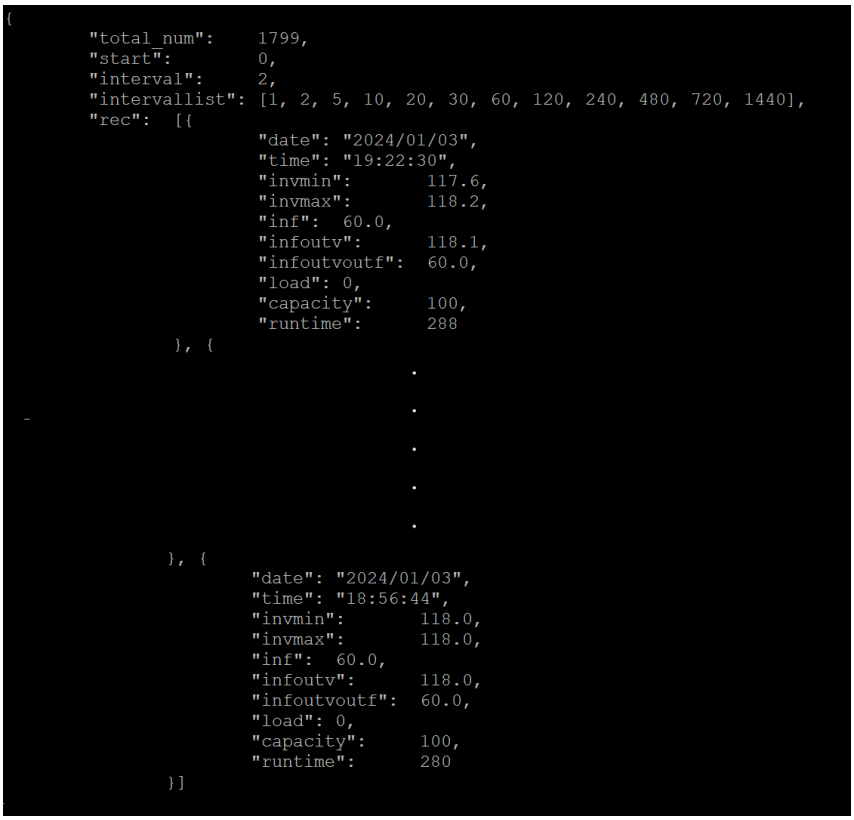
curl **-X PUT** http://<IP>/api/upsevent/event/ -d '{"reset": "true"}' -H "token:**<Token**>"

- Ereignisprotokolldatei herunterladen

curl http://<IP>/api/upsevent/event/download/ --output **<Download Dateiname>** -H "token:**<Token**>"

17. UPS Aufzeichnungsdaten

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



(Anzeige der 10 besten Datensätze)

- Nächste 10 Datensätze anzeigen

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

- Datensätze überprüfen

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

- Alle Datensätze löschen

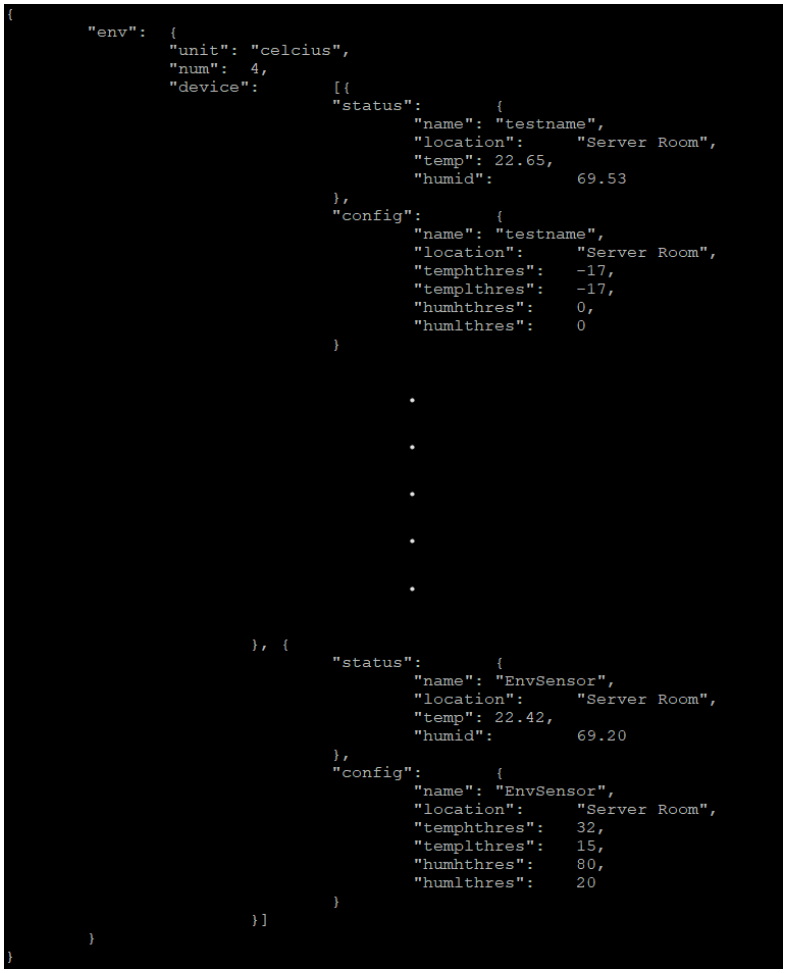
curl **-X PUT** http://<IP>/api/upsrec/rec/ -d '{"reset": "true"}' -H "token:<Token>"

- Datensatzdatei herunterladen

curl http://<IP>/api/upsevent/event/download/ --output **<Download Dateiname>** -H "token:<Token>"

18. Zubehör

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



- Informationen des ersten zusätzlichen Umgebungssensors anzeigen

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

- Temperatureinheit anzeigen

curl **-v** http://<IP>/api/accessory/env/unit/ -H "token:<Token>"

- Legen Sie den Namen des ersten Umgebungssensors für Zubehör als "Testname" fest.

curl **-X PUT** http://<IP>/api/accessory/env/device/1/config/ -d '{"name": "testname"}' -H "token:<Token>"

- Obere Temperaturschwelle einstellen

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

- Zubehör Basis einstellen

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 "token:<Token>"

- Zubehörkontakt einstellen

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

⇨ "Einheit"→ "Celcius" 、"Fahrenheit"
⇨ "Name"→ <String>
⇨ "Standort"→ <String>
⇨ "temphthres"→ <Zahl>
⇨ "templthres"→ <Zahl>
⇨ "temphyster"→ <Nummer>
⇨ "tempchange"→ <Nummer>
⇨ "humhthres"→ <Nummer>
⇨ "humlthres"→ <Nummer>
⇨ "humhyster"→ <Nummer>
⇨ "humchange"→ <Nummer>
⇨ "kontakt1name"→ <String>
⇨ "contact1state"→ "open" 、"close"
⇨ "kontakt2name"→ <String>
⇨ "contact2state"→ "open" 、"close"
⇨ "kontakt3name"→ <String>
⇨ "contact3state"→ "open" 、"close"
⇨ "contact4name"→ <String>
⇨ "contact4state"→ "open" 、"close"

CyberPower

CyberPower | USV Systeme, PDU, Überspannungsschutz | Professionelle Stromversorgung Lösungen

CyberPower Systems GmbH
Edisonstr. 16
85716 Unterschleissheim
Germany

T: +49-89-1 222 166 -0 F: +49-89-1 222 166 -29
E: sales@cyberpower.de
Web: www.cyberpower.de
Home | CyberPower Wiki (cyberpowersystems.de)

CE

K01-E000097-00