

Restful API Basics

- Default port number is 443
- Restful API use JSON over HTTPS

1. Login / Logout

This example uses the default username and password, admin/gtadmin1. Upon successfully logging in the unit will return a Cookie / Session ID. The Session ID must be used as part of all additional commands sent to the unit.

POST <https://xxx.xxx.xxx.xxx/login>

Body Syntax

```
{"username": "admin", "password": "gtadmin1", "rememberme": true}
```

Example Session ID:

Set-Cookie: session=id=9iNS4gEJc0sQ9QcgVPd;path=/

Once a session has been established it is controlled by the Key Press Timeout value, 60 to 3600 seconds. The Key Press Timeout value can be modified using the “Edit Chassis Name / Key Press Timeout” option in Section 2. System. The Key Press Timeout may be displayed and reset using the following options.

Display Public Information

GET <https://xxx.xxx.xxx.xxx/sysInfoPublic>

Display Key Press Timeout

GET <https://xxx.xxx.xxx.xxx/active>

Reset Key Press Timeout (60-3600 seconds)

POST <https://xxx.xxx.xxx.xxx/ping>

Logout

POST <https://xxx.xxx.xxx.xxx/logout>

2. System

Display System Information

GET <https://xxx.xxx.xxx.xxx/sysInfo>

Display General System Setting

GET <https://xxx.xxx.xxx.xxx/miscCfg>

Edit Chassis Name / Key Press Timeout

PUT <https://xxx.xxx.xxx.xxx/miscCfg>

Body Syntax

```
{"chassisName": "NewChassisName", "keyPressTimeout": "60"}
```

Note – Key press timeout range 60-3600 seconds.

Display Authentication

GET <https://xxx.xxx.xxx.xxx/authentication>

Enable TACACS

PUT <https://xxx.xxx.xxx.xxx/authentication>

Body Syntax

```
{"local": true, "tacacs": {"on": true, "server": "xxx.xxx.xxx.xxx", "secret": "abcd1234"}}
```

Disable TACACS

PUT <https://xxx.xxx.xxx.xxx/authentication>

Body Syntax

```
{"local": true, "tacacs": {"on": false, "server": "xxx.xxx.xxx.xxx", "secret": "abcd1234"}}
```

Display Privilege

GET <https://xxx.xxx.xxx.xxx/availablePrivileges>

Display Group

GET <https://xxx.xxx.xxx.xxx/groups>

Create Group

POST <https://xxx.xxx.xxx.xxx/groupAdd>

Body Syntax

```
{"name": "NewGroup", "privileges": ["AAA", "USR", "DTC", "DTV", "EXC", "IPC", "IPV", "LGC", "LGV", "MIS", "PBC", "PBV", "PTC", "PTV", "RBT", "TPC", "TPV", "UPG", "ADM"]}
```

Note - Privileges may be added or removed as desired.

- AAA - authentication, authorization, account
- ADM - user administrator
- DTC - date, time, ntp configuration
- DTV - date, time, ntp view
- EXC - export/import
- IPC - maintenance network ip configuration
- IPV - maintenance network ip view
- LGC - syslog, snmp configuration
- LGV - syslog, snmp view
- MIS - miscellaneous
- PBC - packet broker configuration
- PBV - packet broker view
- PTC - port configuration
- PTV - port view
- RBT - chassis reboot
- TPC - tap config
- TPV - tap view
- UPG - software field upgrade
- USR - account configuration

Modify Group

POST <https://xxx.xxx.xxx.xxx/groupChange>

Body Syntax

```
{"name": "NewGroup", "privileges": ["MIS", "PBC", "PBV", "PTC"], "oldName": "NewGroup"}
```

Delete Group

POST <https://xxx.xxx.xxx.xxx/groupDelete>

Body Syntax

```
{"name": "NewGroup"}
```

Display User

GET <https://xxx.xxx.xxx.xxx/userAll>

Create User

POST <https://xxx.xxx.xxx.xxx/userAdd>

Body Syntax

```
{"username": "NewUser", "password": "NewUserPW", "group": "NewGroup"}
```

Change User Password

POST <https://xxx.xxx.xxx.xxx/userChange>

Body Syntax

```
{"username": "User123", "password": "NewPW", "group": "Group", "oldUsername": "User123"}
```

Delete User

POST <https://xxx.xxx.xxx.xxx/userDelete>

Body Syntax

```
{"username": "NewUser"}
```

Display Network Setting

GET <https://xxx.xxx.xxx.xxx/maintNetwork>

Display Date & Time

GET <https://xxx.xxx.xxx.xxx/dateTime>

Display Time Zone

GET <https://xxx.xxx.xxx.xxx/timezones>

Enable NTP

PUT <https://xxx.xxx.xxx.xxx/dateTime>

Body Syntax

```
{"timeZone": "America/Chicago", "ntp": {"on": true, "usePool": false, "ipAddress": "xxx.xxx.xxx.xxx"}, "date": "2/10/2021", "time": "15:32"}
```

Disable NTP

PUT <https://xxx.xxx.xxx.xxx/dateTime>

Body Syntax

```
{"timeZone": "America/Chicago", "ntp": {"on": false, "usePool": false, "ipAddress": "xxx.xxx.xx.xxx"}, "date": "2/10/2021", "time": "15:33"}
```

Set Date/Time Manually

PUT <https://xxx.xxx.xxx.xxx/dateTime>

Body Syntax

```
{"timeZone": "America/Chicago", "ntp": {"on": false, "usePool": false, "ipAddress": "xxx.xxx.xxx.xxx"}, "date": "6/15/2021", "time": "12:20"}
```

Set Network Setting

PUT <https://xxx.xxx.xxx.xxx/maintNetwork>

Body Syntax

```
{"dhcp": false, "loadedSslCertUsed": false, "sslCertLoaded": true, "address": "xxx.xxx.xxx.xx", "mask": "255.255.255.0", "gateway": "xxx.xxx.xxx.xxx", "dns1": "", "dns2": ""}
```

Display Syslog

GET <https://xxx.xxx.xxx.xxx/syslogCfg>

Enable Syslog

PUT <https://xxx.xxx.xxx.xxx/syslogCfg>

Body Syntax

```
{"on":true,"useUnitId":false,"unitId":"0","ipAddress":"xxx.xxx.xxx.xxx","protocol":"UDP","port":"514"}
```

Syslog Test

POST <https://xxx.xxx.xxx.xxx/syslogTest>

Disable Syslog

PUT <https://xxx.xxx.xxx.xxx/syslogCfg>

Body Syntax

```
{"on":false,"useUnitId":false,"unitId":"0","ipAddress":"xxx.xxx.xxx.xxx","protocol":"UDP","port":"514"}
```

Display SNMP

GET <https://xxx.xxx.xxx.xxx/snmpCfg>

Enable SNMPv2rw

PUT <https://xxx.xxx.xxx.xxx/snmpCfg>

Body Syntax

```
{"on":true,"accessPort":"161","trapPort":"162","trapIpAddress":"xxx.xxx.xxx.xxx","v3user":"user1234","v3authType":"MD5","v3authPass":"auth1234","v3privPass":"priv1234","v3privProt":"DES","communityPassword":"public","mode":"V2rw"}
```

Enable SNMPv3 MD5/DES

PUT <https://xxx.xxx.xxx.xxx/snmpCfg>

Body Syntax

```
{"on":true,"accessPort":"161","trapPort":"162","trapIpAddress":"xxx.xxx.xxx.xxx","v3user":"user1234","v3authType":"MD5","v3authPass":"auth1234","v3privPass":"priv1234","v3privProt":"DES","communityPassword":"public","mode":"V3"}
```

Enable SNMPv3 SHA/AES

PUT <https://xxx.xxx.xxx.xxx/snmpCfg>

Body Syntax

```
{"on":true,"accessPort":"161","trapPort":"162","trapIpAddress":"xxx.xxx.xxx.xxx","v3user":"user1234","v3authType":"SHA","v3authPass":"auth1234","v3privPass":"priv1234","v3privProt":"AES","communityPassword":"public","mode":"V3"}
```

SNMP Test

POST <https://xxx.xxx.xxx.xxx/snmpTest>

Disable SNMP

PUT <https://xxx.xxx.xxx.xxx/snmpCfg>

Body Syntax

```
{"on":false,"accessPort":"161","trapPort":"162","trapIpAddress":"xxx.xxx.xxx.xxx","v3user":"user","v3authType":"MD5","v3authPass":"auth1234","v3privPass":"prov1234","v3privProt":"DES","communityPassword":"gtpublic","mode":"V2rw"}
```

Reboot

POST <https://xxx.xxx.xxx.xxx/reboot>

3. Packet Broker

Display Packet Broker Configuration

GET <https://xxx.xxx.xxx.xxx/pbConfig>

Display Filter Template

GET <https://xxx.xxx.xxx.xxx/filtTemplates>

Create Filter Template

POST <https://xxx.xxx.xxx.xxx/filterTemplateAdd>

Body Syntax

```
{"name":"NewFilterTemp","description":"","enabled":true,"filterType":"PASSBY","srcMac":"","srcMacMask":"ff:ff:ff:ff:ff:ff","dstMac":"","dstMacMask":"ff:ff:ff:ff:ff:ff","etherType":"","srcIp":"","srcIpMask":"255.255.255.255","dstIp":"","dstIpMask":"255.255.255.255","innerVlanId":"","outerVlanId":"","dscp":"","ipProtocol":"","l4SrcStartPort":"","l4SrcEndPort":"","l4DstStartPort":"","l4DstEndPort":"","egressFilterPort":""}
```

Note – The filter type may be PASSALL, PASSBY or DENYBY.

Modify Filter Template

POST <https://xxx.xxx.xxx.xxx/filterTemplateChange>

Body Syntax

```
{"name":"NewTemplate","description":"","enabled":true,"filterType":"PASSBY","dstMac":"","dstMacMask":"ff:ff:ff:ff:ff:ff","srcMac":"","srcMacMask":"ff:ff:ff:ff:ff:ff","etherType":"","ipProtocol":"","srcIp":"10.10.10.11","srcIpMask":"255.255.255.255","dstIp":"","dstIpMask":"255.255.255.255","l4SrcStartPort":"","l4DstStartPort":"","l4SrcEndPort":"","l4DstEndPort":"","outerVlanId":"","innerVlanId":"","dscp":"","egressFilterPort":"","oldName":"NewTemplate"}
```

Delete Filter Template

POST <https://xxx.xxx.xxx.xxx/filterTemplateRemove>

Body Syntax

```
{"name":"NewFilterTemp"}
```

Display Load Balance Group

GET <https://xxx.xxx.xxx.xxx/loadBalanceGroups>

Create Load Balance Group

POST <https://xxx.xxx.xxx.xxx/loadBalanceGroupAdd>

Body Syntax

```
{"name": "NewLBGroup", "description": "", "ports": ["17", "19", "23", "24"]}
```

Note – String all desired ports as shown in the example above.

Modify Load Balance Group

POST <https://xxx.xxx.xxx.xxx/loadBalanceGroupChange>

Body Syntax

```
{"name": "NewLBG", "description": "", "ports": ["21", "22", "23", "24", "26"], "oldName": "NewLBG"}
```

Delete Load Balance Group

POST <https://xxx.xxx.xxx.xxx/loadBalanceGroupRemove>

Body Syntax

```
{"name": "NewLBGroup"}
```

Display Load Balance Policy

GET <https://xxx.xxx.xxx.xxx/lbPolicy>

Modify Load Balance Policy

PUT <https://xxx.xxx.xxx.xxx/lbPolicy>

Body Syntax

```
{"ipv4Src": "YES", "ipv4Dst": "YES", "l4SrcPort": "NO", "l4DstPort": "NO", "macSrc": "NO", "macDst": "NO"}
```

Note – The Load Balance Policy allows L2 to be enabled or L3 and/or L4 to be enabled.

Display Config Map Counts

GET <https://xxx.xxx.xxx.xxx/configMapCounts>

Create Config Map / Ingress Filter

POST <https://xxx.xxx.xxx.xxx/configMapAdd>

Body Syntax

```
{"loadBalanceGroup": {}, "configMap": {"ingressPorts": ["4"], "egress": {"ports": ["6"], "trunkGroup": ""}, "name": "NewConfigMap", "description": "", "enabled": true, "ingressFilters": [{"name": "", "description": "", "enabled": true, "filterType": "PASSALL", "srcMac": "", "srcMacMask": "ff:ff:ff:ff:ff:ff", "dstMac": "", "dstMacMask": "ff:ff:ff:ff:ff:ff", "etherType": "", "srcIp": "", "srcIpMask": "255.255.255.255", "dstIp": "", "dstIpMask": "255.255.255.255", "innerVlanId": "", "outerVlanId": "", "dscp": "", "ipProtocol": "", "l4SrcStartPort": "", "l4SrcEndPort": "", "l4DstStartPort": "", "l4DstEndPort": "", "egressFilterPort": ""}], "egressFilters": {"18": []}}
```

Note - Multiple ingress ports, egress ports and ingress filters may be added.

Create Config Map / Ingress Filter / Egress Filter

POST <https://xxx.xxx.xxx.xxx/configMapAdd>

Body Syntax

```
{"loadBalanceGroup": {}, "configMap": {"ingressPorts": ["4"], "egress": {"ports": ["6"], "trunkGroup": ""}, "name": "NewConfigMap", "description": "", "enabled": true, "ingressFilters": [{"name": "", "description": "", "enabled": true, "filterType": "PASSALL", "srcMac": "", "srcMacMask": "ff:ff:ff:ff:ff:ff", "dstMac": "", "dstMacMask": "ff:ff:ff:ff:ff:ff", "etherType": "", "srcIp": "", "srcIpMask": "255.255.255.255", "dstIp": "", "dstIpMask": "255.255.255.255", "innerVlanId": "", "outerVlanId": "", "dscp": "", "ipProtocol": "", "l4SrcStartPort": "", "l4SrcEndPort": "", "l4DstStartPort": "", "l4DstEndPort": "", "egressFilterPort": ""}], "egressFilters": {"18": [{"name": "NewEgressFilter", "description": "", "enabled": true, "filterType": "PASSBY", "srcMac": "", "srcMacMask": "ff:ff:ff:ff:ff:ff", "dstMac": "", "dstMacMask": "ff:ff:ff:ff:ff:ff", "etherType": "", "srcIp": "192.168.1.25", "srcIpMask": "255.255.255.255", "dstIp": "", "dstIpMask": "255.255.255.255", "innerVlanId": "", "outerVlanId": "", "dscp": "", "ipProtocol": "", "l4SrcStartPort": "", "l4SrcEndPort": "", "l4DstStartPort": "", "l4DstEndPort": "", "egressFilterPort": "18"}]}}
```

Note - Multiple ingress ports, egress ports, ingress filters and egress filters may be added.

Modify Config Map Priority

POST <https://xxx.xxx.xxx.xxx/configMapPriorityEnableChange>

Body Syntax

```
[{"name": "CM1", "enabled": true}, {"name": "CM2", "enabled": true}, {"name": "CM3", "enabled": true}]
```

Note – String the config maps as shown in the above example. The priority is established highest to lowest based on the order listed.

Enable/Disable Config Map

POST <https://xxx.xxx.xxx.xxx/configMapPriorityEnableChange>

Body Syntax

```
[{"name": "CM1", "enabled": true}, {"name": "CM2", "enabled": false}, {"name": "CM3", "enabled": true}]
```

Note – String the config maps as shown in the above example. Config maps may be enabled or disabled by modifying the “enabled” option true/false, true = enabled, false = disabled.

Delete Config Map

POST <https://xxx.xxx.xxx.xxx/configMapRemove>

Body Syntax

```
["CM1", "CM2", "CM3"]
```

Note – Identify the config map(s) using the “name”.

Clear Config Map Counters

POST <https://xxx.xxx.xxx.xxx/configMapCountsClear>

Refresh Config Map Counters

GET <https://xxx.xxx.xxx.xxx/configMapCounts>

4. Port Info

Display Port Configuration

GET <https://xxx.xxx.xxx.xxx/portConfigGet>

Modify Port Configuration

PUT <https://xxx.xxx.xxx.xxx/portConfigPut>

Body Syntax (GAA10G20)

```
{
  "ports": [
    {
      "portNumber": "1",
      "speedSet": "10G",
      "mode": "normal",
      "description": "description",
      "sfpVendorPn": "",
      "split": "NO"
    },
    {
      "portNumber": "2",
      "speedSet": "10G",
      "mode": "normal",
      "description": "description",
      "sfpVendorPn": "",
      "split": "NO"
    },
    {
      "portNumber": "3",
      "speedSet": "10G",
      "mode": "normal",
      "description": "description",
      "sfpVendorPn": "",
      "split": "NO"
    },
    {
      "portNumber": "4",
      "speedSet": "10G",
      "mode": "normal",
      "description": "description",
      "sfpVendorPn": "",
      "split": "NO"
    },
    {
      "portNumber": "5",
      "speedSet": "10G",
      "mode": "normal",
      "description": "description",
      "sfpVendorPn": "",
      "split": "NO"
    },
    {
      "portNumber": "6",
      "speedSet": "10G",
      "mode": "normal",
      "description": "description",
      "sfpVendorPn": "",
      "split": "NO"
    },
    {
      "portNumber": "7",
      "speedSet": "10G",
      "mode": "normal",
      "description": "description",
      "sfpVendorPn": "",
      "split": "NO"
    },
    {
      "portNumber": "8",
      "speedSet": "10G",
      "mode": "normal",
      "description": "description",
      "sfpVendorPn": "",
      "split": "NO"
    },
    {
      "portNumber": "9",
      "speedSet": "10G",
      "mode": "normal",
      "description": "description",
      "sfpVendorPn": "",
      "split": "NO"
    },
    {
      "portNumber": "10",
      "speedSet": "10G",
      "mode": "normal",
      "description": "description",
      "sfpVendorPn": "",
      "split": "NO"
    },
    {
      "portNumber": "11",
      "speedSet": "10G",
      "mode": "normal",
      "description": "description",
      "sfpVendorPn": "",
      "split": "NO"
    },
    {
      "portNumber": "12",
      "speedSet": "10G",
      "mode": "normal",
      "description": "description",
      "sfpVendorPn": "",
      "split": "NO"
    }
  ]
}
```

Note – Whenever modifying a port(s) all ports must be included in the body syntax.

Body Syntax (GAA10G10)

```
{
  "ports": [
    {
      "portNumber": "3",
      "speedSet": "10G",
      "mode": "normal",
      "description": "description",
      "sfpVendorPn": "",
      "split": "NO"
    },
    {
      "portNumber": "4",
      "speedSet": "10G",
      "mode": "normal",
      "description": "description",
      "sfpVendorPn": "",
      "split": "NO"
    },
    {
      "portNumber": "5",
      "speedSet": "10G",
      "mode": "normal",
      "description": "description",
      "sfpVendorPn": "",
      "split": "NO"
    },
    {
      "portNumber": "6",
      "speedSet": "10G",
      "mode": "normal",
      "description": "description",
      "sfpVendorPn": "",
      "split": "NO"
    },
    {
      "portNumber": "7",
      "speedSet": "10G",
      "mode": "normal",
      "description": "description",
      "sfpVendorPn": "",
      "split": "NO"
    },
    {
      "portNumber": "8",
      "speedSet": "10G",
      "mode": "normal",
      "description": "description",
      "sfpVendorPn": "",
      "split": "NO"
    },
    {
      "portNumber": "9",
      "speedSet": "10G",
      "mode": "normal",
      "description": "description",
      "sfpVendorPn": "",
      "split": "NO"
    },
    {
      "portNumber": "10",
      "speedSet": "10G",
      "mode": "normal",
      "description": "description",
      "sfpVendorPn": "",
      "split": "NO"
    },
    {
      "portNumber": "11",
      "speedSet": "10G",
      "mode": "normal",
      "description": "description",
      "sfpVendorPn": "",
      "split": "NO"
    },
    {
      "portNumber": "12",
      "speedSet": "10G",
      "mode": "normal",
      "description": "description",
      "sfpVendorPn": "",
      "split": "NO"
    }
  ]
}
```

Note – Whenever modifying a port(s) all ports must be included in the body syntax.

Display Port Availability

GET <https://xxx.xxx.xxx.xxx/portAvailability>

Display Port Statistics

GET <https://xxx.xxx.xxx.xxx/portCounterGet>

Clear Port Statistics

PUT <https://xxx.xxx.xxx.xxx/portCounterClear>