

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. Set Mode

Span

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

Body Syntax

```
{"mode":"span1"}
```

Breakout

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

Body Syntax

```
{"mode": "breakout"}
```

Filter

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

Body Syntax

```
{"mode": "filter"}
```

Aggregate

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

Body Syntax

```
{"mode": "aggregate"}
```

Filter Tap

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

Body Syntax

```
{"mode": "filtertap"}
```

4. Span Mode

4.1. Port Info

Display Port Configuration

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

Modify Port Configuration

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

Body Syntax

```
{"ports": [{"portNumber": "1", "speedSet": "1G", "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"}]}
```


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>

5. Breakout Mode

5.1. Port Info

Display Port Configuration

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

Modify Port Configuration

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

Body Syntax

```
{ "ports": [ { "portNumber": "1", "speedSet": "1G", "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" } ] }
```

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>

6. Filter Mode

6.1. 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 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": ["01"], "egress": {"ports": ["02"], "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": {"02": []}}
```

Note - Multiple ingress ports, egress ports and ingress 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>

6.2. Port Info

Display Port Configuration

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

Modify Port Configuration

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

Body Syntax

```
{ "ports": [ { "portNumber": "1", "speedSet": "1G", "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" } ] }
```

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>

7. Aggregate Mode

7.1. Port Info

Display Port Configuration

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

Modify Port Configuration

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

Body Syntax

```
{ "ports": [ { "portNumber": "1", "speedSet": "1G", "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" } ] }
```

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>

8. Filter Tap Mode

8.1. Packet Broker

Display Packet Broker Configuration

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

Display Filter Template

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

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 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": ["01"],
    "egress": {
      "ports": ["03", "04"]
    },
    "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": {
      "03": [],
      "04": []
    }
  }
}
```

Note - In the filter tap mode config maps may be made:

Port 1 to Port 3 and/or Port 4

Port 2 to Port 3 and/or Port 4

Multiple ingress 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>

8.2. Port Info

Display Port Configuration

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

Modify Port Configuration

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

Body Syntax

```
{ "ports": [ { "portNumber": "1", "speedSet": "1G", "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" } ] }
```

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>