

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":["17"],"egress":{"ports":["18"],"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":["17"],"egress":{"ports":["18"],"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>

5. 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": "10G", "mode": "normal", "description": "port description", "sfpVendorPn": "", "split": "NO" }, { "portNumber": "2", "speedSet": "10G", "mode": "normal", "description": "port description", "sfpVendorPn": "", "split": "NO" }, { "portNumber": "3", "speedSet": "10G", "mode": "normal", "description": "port description", "sfpVendorPn": "", "split": "NO" }, { "portNumber": "4", "speedSet": "10G", "mode": "normal", "description": "port description", "sfpVendorPn": "", "split": "NO" }, { "portNumber": "5", "speedSet": "10G", "mode": "normal", "description": "port description", "sfpVendorPn": "", "split": "NO" }, { "portNumber": "6", "speedSet": "10G", "mode": "normal", "description": "port description", "sfpVendorPn": "", "split": "NO" }, { "portNumber": "7", "speedSet": "10G", "mode": "normal", "description": "port description", "sfpVendorPn": "", "split": "NO" }, { "portNumber": "8", "speedSet": "10G", "mode": "normal", "description": "port description", "sfpVendorPn": "", "split": "NO" }, { "portNumber": "9", "speedSet": "10G", "mode": "normal", "description": "port description", "sfpVendorPn": "", "split": "NO" }, { "portNumber": "10", "speedSet": "10G", "mode": "normal", "description": "port description", "sfpVendorPn": "", "split": "NO" }, { "portNumber": "11", "speedSet": "10G", "mode": "normal", "description": "port description", "sfpVendorPn": "", "split": "NO" }, { "portNumber": "12", "speedSet": "10G", "mode": "normal", "description": "port description", "sfpVendorPn": "", "split": "NO" }, { "portNumber": "13", "speedSet": "10G", "mode": "normal", "description": "port description", "sfpVendorPn": "", "split": "NO" }, { "portNumber": "14", "speedSet": "10G", "mode": "normal", "description": "port description", "sfpVendorPn": "", "split": "NO" }, { "portNumber": "15", "speedSet": "10G", "mode": "normal", "description": "port description", "sfpVendorPn": "", "split": "NO" }, { "portNumber": "16", "speedSet": "10G", "mode": "normal", "description": "port description", "sfpVendorPn": "", "split": "NO" }, { "portNumber": "17", "speedSet": "10G", "mode": "normal", "description": "port description", "sfpVendorPn": "", "split": "NO" }, { "portNumber": "18", "speedSet": "10G", "mode": "normal", "description": "port description", "sfpVendorPn": "", "split": "NO" }, { "portNumber": "19", "speedSet": "10G", "mode": "normal", "description": "port description", "sfpVendorPn": "", "split": "NO" }, { "portNumber": "20", "speedSet": "10G", "mode": "normal", "description": "port description", "sfpVendorPn": "", "split": "NO" } ] }
```

```

:"normal", "description": "port
description", "sfpVendorPn": "", "split": "NO"}, {"portNumber": "21", "speedSet": "10G", "mode"
:"normal", "description": "port
description", "sfpVendorPn": "", "split": "NO"}, {"portNumber": "22", "speedSet": "10G", "mode"
:"normal", "description": "port
description", "sfpVendorPn": "", "split": "NO"}, {"portNumber": "23", "speedSet": "10G", "mode"
:"normal", "description": "port
description", "sfpVendorPn": "", "split": "NO"}, {"portNumber": "24", "speedSet": "10G", "mode"
:"normal", "description": "port
description", "sfpVendorPn": "", "split": "NO"}, {"portNumber": "25", "speedSet": "10G", "mode"
:"normal", "description": "port
description", "sfpVendorPn": "", "split": "NO"}, {"portNumber": "26", "speedSet": "10G", "mode"
:"normal", "description": "port
description", "sfpVendorPn": "", "split": "NO"}, {"portNumber": "27", "speedSet": "10G", "mode"
:"normal", "description": "port
description", "sfpVendorPn": "", "split": "NO"}, {"portNumber": "28", "speedSet": "10G", "mode"
:"normal", "description": "port
description", "sfpVendorPn": "", "split": "NO"}, {"portNumber": "29", "speedSet": "10G", "mode"
:"normal", "description": "port
description", "sfpVendorPn": "", "split": "NO"}, {"portNumber": "30", "speedSet": "10G", "mode"
:"normal", "description": "port
description", "sfpVendorPn": "", "split": "NO"}, {"portNumber": "31", "speedSet": "10G", "mode"
:"normal", "description": "port
description", "sfpVendorPn": "", "split": "NO"}, {"portNumber": "32", "speedSet": "10G", "mode"
:"normal", "description": "port
description", "sfpVendorPn": "", "split": "NO"}, {"portNumber": "33", "speedSet": "10G", "mode"
:"normal", "description": "port
description", "sfpVendorPn": "", "split": "NO"}, {"portNumber": "34", "speedSet": "10G", "mode"
:"normal", "description": "port
description", "sfpVendorPn": "", "split": "NO"}, {"portNumber": "35", "speedSet": "10G", "mode"
:"normal", "description": "port
description", "sfpVendorPn": "", "split": "NO"}, {"portNumber": "36", "speedSet": "10G", "mode"
:"normal", "description": "port
description", "sfpVendorPn": "", "split": "NO"}, {"portNumber": "37", "speedSet": "10G", "mode"
:"normal", "description": "port
description", "sfpVendorPn": "", "split": "NO"}, {"portNumber": "38", "speedSet": "10G", "mode"
:"normal", "description": "port
description", "sfpVendorPn": "", "split": "NO"}, {"portNumber": "39", "speedSet": "10G", "mode"
:"normal", "description": "port
description", "sfpVendorPn": "", "split": "NO"}, {"portNumber": "40", "speedSet": "10G", "mode"
:"normal", "description": "port
description", "sfpVendorPn": "", "split": "NO"}, {"portNumber": "41", "speedSet": "40G", "mode"
:"normal", "description": "port
description", "sfpVendorPn": "", "split": "NO"}, {"portNumber": "42", "speedSet": "40G", "mode"
:"normal", "description": "port
description", "sfpVendorPn": "", "split": "NO"}, {"portNumber": "43", "speedSet": "40G", "mode"
:"normal", "description": "port
description", "sfpVendorPn": "", "split": "NO"}, {"portNumber": "44", "speedSet": "40G", "mode"
:"normal", "description": "port 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>