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=9iNS4gEJcOsQ9QcgVPd;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.x
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.x
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":"UD
P","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":"U
DP","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","v3us
er":"user1234","v3authType":"MD5","v3authPass":"auth1234","v3privPass":"priv1234","v3p
rivProt":"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","v3us
er":"user1234","v3authType":"MD5","v3authPass":"auth1234","v3privPass":"priv1234","v3p
rivProt":"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. Bypass Taps

Display Bypass Taps Options (Heartbeat Setting)

GET https://xxx.xxx.xxx.xxx/gettapoptions

Modify Bypass Taps Options (Heartbeat Setting)

PUT https://xxx.xxx.xxx.xxx/settapoptions

Body Syntax

```
{"hbPacketWindow":10,"hbPerSecond":10}
```

Note – No. of Lost Heartbeat Packets, 10-100 / Heartbeats per Second, 10-100.

Display Bypass Tap Configuration

GET https://xxx.xxx.xxx.xxx/tapGet

Modify Tap Configuration

PUT https://xxx.xxx.xxx.xxx/tapPut

Body Syntax


```
{"gt-taps":[{"forceBypass":"false","forceInline":"false","fosFailMode":"open","lfpEnab
le":"true","reverseBypass":"false","tapDescription":"","tapElements":[{"description":"
element","isGroup":"false","monitorPortsE":[],"monitorPortsI":[],"portA":"1","portB":"
1"},{"description":"element","isGroup":"false","monitorPortsE":[],"monitorPortsI":[],"
portA":3,"portB":4,"revertive":"false","groupType":"activeStandby","ForcePrimary":"fal
se"},{"description":"element","isGroup":"false","monitorPortsE":[],"monitorPortsI":[],
"portA":"2","portB":"2"}]}]}
```


Modify Tap Configuration (Add Secondary Inline Appliance)

PUT https://xxx.xxx.xxx.xxx/tapPut

Body Syntax


```
{"gt-taps":[{"forceBypass":"false","forceInline":"false","fosFailMode":"open","lfpEnable":true
,"reverseBypass":"false","tapDescription":"","tapElements":[{"description":"element","isGroup"
:"false","monitorPortsE":[],"monitorPortsI":[],"portA":"1","portB":"1"},{"description":"elemen
t","isGroup":"true","monitorPortsE":[],"monitorPortsI":[],"groupType":"activeStandby","reverti
ve":"false","ForcePrimary":"false","gElements":[{"portA":"3","portB":"4"},{"portA":"5","portB"
:"6"}]},{"description":"element","isGroup":"false","monitorPortsE":[],"monitorPortsI":[],"port
A":"2","portB":"2"}]}]}
```


Modify Tap Configuration (Remove Secondary Inline Appliance)

PUT https://xxx.xxx.xxx.xxx/tapPut

Body Syntax


```
{"gt-taps":[{"forceBypass":"false","forceInline":"false","fosFailMode":"open","lfpEnab
le":false,"reverseBypass":"false","tapDescription":"","tapElements":[{"description":"e
lement","isGroup":"false","monitorPortsE":[],"monitorPortsI":[],"portA":"1","portB":"1
"},{"ForcePrimary":true,"description":"element","groupType":"activeStandby","isCoupled
":"false","isGroup":"false","revertive":"false","portA":3,"portB":4},{"description":"e
lement","isGroup":"false","monitorPortsE":[],"monitorPortsI":[],"portA":"2","portB":"2
"}]}]}
```

Switch To Primary

PUT https://xxx.xxx.xxx.xxx/tapPut

Body Syntax


```
{"gt-taps":[{"forceBypass":"false","forceInline":"false","fosFailMode":"open","lfpEnab
le":false,"reverseBypass":"false","tapDescription":"","tapElements":[{"description":"e
lement","isGroup":"false","monitorPortsE":[],"monitorPortsI":[],"portA":"1","portB":"1
"},{"ForcePrimary":true,"description":"element","gElements":[{"portA":"3","portB":"4"}
,{"portA":"5","portB":"6"}],"groupType":"activeStandby","isCoupled":"false","isGroup":
"true","revertive":"false"},{"description":"element","isGroup":"false","monitorPortsE"
:[],"monitorPortsI":[],"portA":"2","portB":"2"}]}]}
```


4. 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","eth
erType":"","srcIp":"","srcIpMask":"255.255.255.255","dstIp":"","dstIpMask":"255.255.25
5.255","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","macD
st":"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":["07"],"egress":{"ports":["08"],"tr
unkGroup":""},"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":"","egre
ssFilterPort":""}]},"egressFilters":{"08":[]}}
```

Note - Multiple ingress ports, egress ports and ingress filters may be added. If the Bypass Tap has a Primary Inline Appliance only the Packet Broker port range is 5 to 12. If the Bypass Tap has a Primary Inline Appliance and Secondary Inline Appliance the Packet Broker port range is 7 to 12.

Create Config Map / Ingress Filter / Egress Filter

POST https://xxx.xxx.xxx.xxx/configMapAdd

Body Syntax


```
{"loadBalanceGroup":{},"configMap":{"ingressPorts":["05"],"egress":{"ports":["08"],"tr
unkGroup":""},"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":"25
5.255.255.255","innerVlanId":"","outerVlanId":"","dscp":"","ipProtocol":"","l4SrcStart
Port":"","l4SrcEndPort":"","l4DstStartPort":"","l4DstEndPort":"","egressFilterPort":""
}]},"egressFilters":{"08":[{"name":"","description":"","enabled":true,"filterType":
"PASSBY","srcMac":"","srcMacMask":"ff:ff:ff:ff:ff:ff","dstMac":"","dstMacMask":"ff:ff:
ff:ff:ff:ff","etherType":"","srcIp":"10.10.10.10","srcIpMask":"255.255.255.255","dstIp
":"","dstIpMask":"255.255.255.255","innerVlanId":"","outerVlanId":"","dscp":"","ipProt
ocol":"","l4SrcStartPort":"","l4SrcEndPort":"","l4DstStartPort":"","l4DstEndPort":"","
egressFilterPort":"08"}]}}
```


Note - Multiple ingress ports, egress ports, ingress filters and egress filters may be added. If the Bypass Tap has a Primary Inline Appliance only the Packet Broker port range is 5 to 12. If the Bypass Tap has a Primary Inline Appliance and Secondary Inline Appliance the Packet Broker port range is 7 to 12.

Modify Config Map Priority

POST https://xxx.xxx.xxx.xxx/configMapPriorityEnableChange

Body Syntax


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


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":"description","sfpV
endorPn":"","split":"NO"},{"portNumber":"2","speedSet":"10G","mode":"normal","description":"de
scription","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","s
peedSet":"10G","mode":"normal","description":"description","sfpVendorPn":"","split":"NO"},{"po
rtNumber":"6","speedSet":"10G","mode":"normal","description":"description","sfpVendorPn":"","s
plit":"NO"},{"portNumber":"7","speedSet":"10G","mode":"normal","description":"description","sf
pVendorPn":"","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