API User Guide

SM24TAT4XB and SM48TAT4XA-RP

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1. Login

URL: /api/login

Method: POST

Request JSON:

```
{
        "login": {
            "username" : "user123",
            "password" : "user123",
            "user_ip":"192.168.1.1",
            "sessid": "375118820"
        }
}
```

Response JSON:

```
{
        "response":{
            "status":"error",
            "message":"Wrong username or password!"
        }
}
```

Section:

Name	Data type	Allowed / Value	Default Value
username	String	1-31 alphanumeric	
password	String	0-31 alphanumeric	
user_ip	String	<ip4 address>	
sessid	String	<cookie>	

2. Logout

URL: /api/logout

Method: POST

Request JSON:

```
{
        "logout": {
            "sessid": "375118820"
        }
}
```

Response JSON:

```
{
        "response":{
            "status":"success"
        }
}
```

Section:

Name	Data type	Allowed / Value	Default Value
sessid	String	<cookie>	

3. Reboot

URL: /api/reboot

Method: POST

Request JSON:

```
{
        "system": {
            "warm": "Yes"
        }
}
```

Response JSON: null

Section:

Name	Data type	Allowed / Value	Default Value
warm	String	“Yes”	

4. Get System Information

URL: /api/get_sysinfo

Method: GET

Request JSON: null

Response JSON:


```
{
        "system":       {
                "information":  {
                        "model_name":"",
                        "description":    "26-Port GbE L2+ Managed PoE Switch",
                        "hardware_version":     "v1.01",
                        "mechanical_version":   "v1.01",
                        "firmware_version":     "v6.54.3300 2019-11-29",
                        "mac_addr":     "00-40-c7-a1-cd-25",
                        "serial_number":        "A054118AR3800001",
                        "system_name":          "Wade",
                        "location":     "",
                        "contact":      "",
                        "system_date": "2017-01-01T01:44:55+09:00",
                        "uptime":       "17:56:09",
                        "cpu_load":     "51%, 25%, 17%",
                                "ram": {
                                        "total": "7272 KBytes",
                                        "free": "1079 KBytes"
                                },
                        "temperature_1":50,
                        "temperature_2":64
                }
        }
}
```

5. Set System Information

URL: /api/set_sysinfo

Method: POST

Request JSON:

```
{
        "system": {
            "information": {
                "system_name": "Test name",
                "location": "Test Location",
                "contact": "Test Contact"
            }
        }
}
```

Response JSON:

```
{
        "system": {
            "information": {
                "system_name": " Test name ",
                "location": "Test Location",
                "contact": "Test Contact"
            }
        }
}
```

Section:

Name	Data type	Allowed / Value	Default Value
system_name	String	1-128 alphanumeric	
location	String	1-128 alphanumeric	
contact	String	1-128 alphanumeric	

6. Get PoE Status

URL: /api/get_poe_status

Method: GET

Request JSON: null

Response JSON:

```
{
        "poe": {
            "total_power_allocate": 140,
            "total_power_used": 48,
            "total_current_used": 95
        },
        "ports":[{
            "id": 1,
            "poe":{
                "pd_class": "2",
                "priority": "Low",
                "port_status": "PoE turned ON",
                "power_allocate": 70,
                "power_used": 29,
                "current_used": 52
            }
        },
        … … …
        ]
}
```

Section:

Name	Data type	Unit
total_power_allocate	Integer	0.1 watt
total_power_used	Integer	0.1 watt
total_current_used	Integer	mA
power_allocate	Integer	0.1 watt
power_used	Integer	0.1 watt
current_used	Integer	mA

7. Get PoE Config

URL: /api/get_poe_config

Method: GET

Request JSON: null

Response JSON:


```
{
        "poe": {
            "poe_firmware_version": "104-100",
            "total_power_watts": 2000,
            "power_determined_mode": "Class",
            "power_management_mode": "Reserved Power",
            "capacitor_detection": true,
            "profile_list": [
            {
                "id": 1,
                "name": "profile1"
            },
            … … …
            ]
        },
        "ports": [
        {
            "id": 1,
            "poe":{
                "mode": "Enabled",
                "priority": "Low",
                "power_limit_user": 30,
                "schedule": "Disabled"
            }
        },
        … … …
        ]
}
```


Section:

Name	Data type	Unit
total_power_watts	Integer	watt
power_limit_user	Integer	watt

8. Set PoE Config

URL: /api/set_poe_config

Method: POST

Request JSON:

```
{
        "poe": {
            "power_determined_mode": "Class",
            "power_management_mode": "Reserved Power",
            "capacitor_detection": true
            },
            "ports": [
            {
                "id": 1,
                "poe":{
                    "mode": "Enabled",
                    "priority": "Low",
                    "power_limit_user": 30,
                    "schedule": "Disabled"
                }
        },
        … … …
        ]
}
```

Response JSON:

```
{
        "poe": {
            "poe_firmware_version": "104-100",
            "total_power_watts": 2000,
            "power_determined_mode": "Class",
            "power_management_mode": "Reserved Power",
            "capacitor_detection": true,
            "profile_list": [
            {
                "id": 1,
                "name": "profile1"
            },
            … … …
            ]
        },
        "ports": [
        {
            "id": 1,
            "poe":{
                "mode": "Enabled",
                "priority": "Low",
                "power_limit_user": 30,
```

```
                "schedule": "Disabled"
            }
        },
        … … …
        ]
}
```

Section:

Name	Data type	Allowed / Value	Default Value
power_determined_mode	String	"Class"、"Allocation"、"LLDP-Med"	Allocation
power_management_mode	String	"Actual Consumption"、"Reserved Power"	Actual Consumption
capacitor_detection	Boolean		false
id	Integer	<Port number>	
mode	String	"Enabled"、"Disabled"	Enabled
priority	String	"Low"、"High"、"Critical"	Low
power_limit_user	Integer	1-30 watt	30
schedule	String	"Disabled"、<Profile Name>	Disabled

9. Get PoE Auto Checking

URL: /api/get_poe_auto_checking

Method: GET

Request JSON: null

Response JSON:

```
{
        "poe": {
            "ping_check": false,
        },
        "ports": [
        {
            "id": 1,
            "poe_auto_checking":{
                "ip": "0.0.0.0",
                "startup_time": 60,
                "interval_time": 30,
                "retry_time": 3,
                "error": 0,
                "total": 0,
                "failure_reboot": false,
                "reboot_time": 15,
                "max_reboot_times": 3
            }
        },
        … … …
        ]
}
```

Section:

Name	Data type
error	Integer
total	Integer

10. Set PoE Auto Checking

URL: /api/set_poe_auto_checking

Method: POST

Request JSON:

```
{
        "poe": {
            "ping_check": false,
        },
        "ports": [
        {
            "id": 1,
            "poe_auto_checking":{
                "ip": "0.0.0.0",
                "startup_time": 60,
                "interval_time": 30,
                "retry_time": 3,
                "failure_reboot": false,
                "reboot_time": 15,
                "max_reboot_times": 3
            }
        },
        … … …
        ]
}
```

Response JSON:

```
{
        "poe": {
            "ping_check": false,
        },
        "ports": [
        {
            "id": 1,
            "poe_auto_checking":{
                "ip": "0.0.0.0",
                "startup_time": 60,
                "interval_time": 30,
                "retry_time": 3,
                "error": 0,
                "total": 0,
                "failure_reboot": false,
                "reboot_time": 15,
                "max_reboot_times": 3
            }
        },
        … … …
        ]
}
```

Section:

Name	Data type	Allowed / Value	Default Value
ping_check	Boolean		false
id	Integer	<Port_number>	
ip	String	<ipv4_address>	
startup_time	Integer	30-600	60
interval_time	Integer	10-120	30
retry_time	Integer	1-5	3
failure_reboot	Boolean		false
reboot_time	Integer	3-120	15
max_ reboot_times	Integer	0-10	3

11. Get Port Statistics

URL: /api/get_port_statistics

Method: GET

Request JSON: null

Response JSON:


```
{
        "ports": [
            {
                "id": 1,
                "statistics": {
                    "rx_packets": {
                        "all": 93536,
                        "octets": 11676072,
                        "unicast": 44332,
                        "multicast": 37536,
                        "broadcast": 11672,
                        "pause": 26816,
                        "64 bytes": 55171,
                        "65-127 bytes": 6235,
                        "128-255 bytes": 5317,
                        "256-511 bytes": 5841,
                        "512-1023 bytes": 3493,
                        "1024-1526 bytes": 1,
                        "1527-max bytes": 0,
                        "Q0":0,
                        "Q1":0,
                        "Q2":0,
                        "Q3":0,
                        "Q4":0,
                        "Q5":0,
                        "Q6":0,
                        "Q7":0,
                        "drop": 26816,
                        "crc_alignment": 0,
                        "oversize": 0,
                        "undersize": 0,
                        "fragments": 0,
                        "jabber": 0,
                         “filtered”: 0
                    },
                    "tx_packets": {
                        "all": 130311,
                        "octets": 14036132,
                        "unicast": 9516,
                        "multicast": 1123,
                        "broadcast": 119672,
                        "pause": 0,
```

```
                    "64 bytes": 77115,
                    "65-127 bytes": 9511,
                    "128-255 bytes": 336,
                    "256-511 bytes": 302,
                    "512-1023 bytes": 1251,
                    "1024-1526 bytes": 2668,
                    "1527-max bytes": 0,
                    "Q0":0,
                    "Q1":0,
                    "Q2":0,
                    "Q3":0,
                    "Q4":0,
                    "Q5":0,
                    "Q6":0,
                    "Q7":0,
                    "drop": 0,
                     “late_excessive_collision”: 0
                }
            }
        },
        … …
    ]
}
```

12. Get Port Config

URL: /api/get_port_config

Method: GET

Request JSON: null

Response JSON:

```
{
    "ports": [
        {
            "id": 1,
            "link": "1Gfdx",
            "media": "copper",
            "speed_mode": "Auto",
            "flow_control": false,
            "jumbo_frames": 9600,
            "description": ""
        },
        … …
    ]
}
```

13. Set Port Config

URL: /api/set_port_config

Method: POST

Request JSON:

```
{
        "ports": [
            {
                "id": 1,
                "speed_mode": "Auto",
                "flow_control": false,
                "jumbo_frames": 9600,
                "description": "test description"
            },
            … …
        ]
}
```

Response JSON:

```
{
        "ports": [
            {
                "id": 1,
                "link": "down",
                "media": "copper",
                "speed_mode": "Auto",
                "flow_control": false,
                "jumbo_frames": 9600,
                "description": "test description"
            },
            … …
        ]
}
```

Section:

Name	Data type	Allowed / Value	Default Value
id	Integer	<Port number>	
speed_mode	String	“Disabled” "Auto" "10Mbps HDX" "10Mbps FDX" "100Mbps HDX" "100Mbps FDX" "1Gbps FDX" "10Gbps FDX"	Auto
flow_control	Boolean		false
jumbo_frames	Integer	1518-10240	10240
description	String	0-63 alphanumeric	

14. Firmware Upgrade

URL: /api/firmware_upgrade

Method: POST

Request JSON:

```
{
        "system": {
            "firmware": {
                "upgrade_url":" http://192.168.5.46/test.dat"
            }
        }
}
```

Response JSON: null

Section:

Name	Data type	Allowed / Value	Default Value
upgrade_url	String	<URL>	

15. Get Firmware Upgrade Status

URL: /api/get_firmware_upgrade_status

Method: GET

Request JSON: null

Response JSON:

```
{
        "system": {
            "firmware": {
                "upgrade_status": "idle"
            }
        }
}
```

16. Get Account Configuration

URL: /api/get_account_config

Method: GET

Request JSON: null

Response JSON:

```
{
        "account": [{
                "username" : "superuser",
                "privilege_level" : 15
        },
        … …
        ]
}
```

17. Set Account Configuration

URL: /api/set_account_config

Method: POST

Request JSON:

```
{
        "account": {
                "status" : "NEW",
                "username" : "superuser",
                "password" : "superuser",
                "privilege_level" : 15
        }
}
```

Response JSON:

```
{
        "account": [{
                "username" : "superuser",
                "privilege_level" : 15
        },
        … …
        ]
}
```

Section:

Name	Data type	Allowed / Value	Default Value
status	String	"EDIT"、"NEW"、"DEL"	
username	String	1-31 alphanumeric	
password	String	0-31 alphanumeric	
privilege_level	Integer	0-15	0

Note: Only modify one at a time.

18. Get MAC Table Information

URL: /api/get_dynamic_mac_table

Method: GET

Request JSON: null

Response JSON:

```
{
        "mac_table": [{
            "type": "Dynamic",
            "mac": "00-40-C7-29-AA-22",
            "vid": 1,
            "port": 9
        },
        … …
        ]
}
```

19. Save Configuration

URL: /api/save_configuration

Method: GET

Request JSON: null

Response JSON:

```
{
        " response ": {
            "status":"success",
            "message":"startup-config saved successfully."
        }
}
```

20. Get System Time

URL: /api/get_system_time

Method: GET

Request JSON: null

Response JSON:


```
{
        "system": {
            "time": {
                "clock_source":"Local Setting",
                "system_date":"2017-01-01 01:01:30",
                "time_zone":"5400",
                "acronym":"",
                "daylight":{
                    "mode": "disable",
                    "offset":60,
                    "start_time": {
                        "year": 0,
                        "month": "Jan",
                        "week": 1,
                        "day": "Mon",
                        "date": 1,
                        "hour": 1,
                        "minute": 0
                    },
                    "end_time": {
                        "year": 0,
                        "month": "Jan",
                        "week": 1,
                        "day": "Mon",
                        "date": 1,
                        "hour": 1,
                        "minute": 0
                    }
                }
            }
        }
}
```

21. Set System Time

URL: /api/set_system_time

Method: POST

Request JSON:

```
{
        "system": {
            "time": {
                "clock_source":"Local Setting",
                "system_date":"2017-01-01 01:01:30",
                "time_zone":"5400",
                "acronym":"",
                "daylight":{
                    "mode": "disable",
                    "offset":60,
                    "start_time": {
                        "year": 2001,
                        "month": "Jan",
                        "week": 1,
                        "day": "Mon",
                        "date": 1,
                        "hour": 1,
                        "minute": 0
                    },
                    "end_time": {
                        "year": 2002,
                        "month": "Jan",
                        "week": 1,
                        "day": "Mon",
                        "date": 1,
                        "hour": 1,
                        "minute": 0
                    }
                }
            }
        }
}
```

Response JSON:

```
{
        "system": {
            "time": {
                "clock_source":"Local Setting",
                "system_date":"2017-01-01 01:01:30",
                "time_zone":"5400",
                "acronym":"",
                "daylight":{
                    "mode": "disable",
                    "offset":60,
```

```
                    "start_time": {
                        "year": 2001,
                        "month": "Jan",
                        "week": 1,
                        "day": "Mon",
                        "date": 1,
                        "hour": 1,
                        "minute": 0
                    },
                    "end_time": {
                        "year": 2002,
                        "month": "Jan",
                        "week": 1,
                        "day": "Mon",
                        "date": 1,
                        "hour": 1,
                        "minute": 0
                    }
                }
            }
        }
}
```

Section:

Name	Data type	Allowed / Value	Default Value
clock_source	String	"Use Local Setting"、"Use NTP Server"	Use Local Setting
system_date	String	"[Year]-[Month]-[Day] [Hour]:[Minute]:[Second]"	
time_zone	String	See "Time Zone Mapping Table" below	
acronym	acronym	acronym	
mode	String	"disable"、"recurring"、"non-recurring"	disable
offset	Integer	1-720 Min	60
year	Integer	2000-2097	2001
month	String	"Jan"、"Feb"、"Mar" "Apr"、"May"、"Jun" "Jul"、"Aug"、"Sep" "Oct"、"Nov"、"Dec"	Jan
week	Integer	1-5	1
day	String	"Mon"、"Tue"、"Wed" "Thu"、"Fri"、"Sat"、"Sun"	Mon
date	Integer	1-31	1
hour	Integer	0-23	0
minute	Integer	0-59	0

Time Zone Mapping Table:

Value	Note
-7200	(GMT-12:00)
-6600	(GMT-11:00)
-6000	(GMT-10:00)
-5400	(GMT-09:00)
-4800	(GMT-08:00)
-4200	(GMT-07:00)
-3600	(GMT-06:00)
-3000	(GMT-05:00)
-2700	(GMT-04:30)
-2400	(GMT-04:00)
-2100	(GMT-03:30)
-1800	(GMT-03:00)
-1200	(GMT-02:00)
-600	(GMT-01:00)
0	(GMT+00:00)
600	(GMT+01:00)
1200	(GMT+02:00)
1800	(GMT+03:00)
2100	(GMT+03:30)
2400	(GMT+04:00)
2700	(GMT+04:30)
3000	(GMT+05:00)
3300	(GMT+05:30)
3450	(GMT+05:45)
3600	(GMT+06:00)
3900	(GMT+06:30)
4200	(GMT+07:00)
4800	(GMT+08:00)
5400	(GMT+09:00)
5700	(GMT+09:30)
6000	(GMT+10:00)
6600	(GMT+11:00)
7200	(GMT+12:00)

22. Get NTP Server

URL: /api/get_ntp_server

Method: GET

Request JSON: null

Response JSON:


```
{
        "system": {
            "ntp":    {
                "automatic": true,
                "interval": 60,
                "server1": "ntp.transition.com",
                "server2": "ntp.transition1.com",
                "server3": "",
                "server4": "",
                "server5": ""
            }
        }
}
```

23. Set NTP Server

URL: /api/set_ntp_server

Method: POST

Request JSON:

```
{
        "system": {
            "ntp":    {
                "automatic": true,
                "interval": 60,
                "server1": "ntp.transition.com",
                "server2": "ntp.transition1.com",
                "server3": "",
                "server4": "",
                "server5": ""
            }
        }
}
```

Response JSON:

```
{
        "system": {
            "ntp":    {
                "automatic": true,
                "interval": 60,
                "server1": "ntp.transition.com",
                "server2": "ntp.transition1.com",
                "server3": "",
                "server4": "",
                "server5": ""
            }
        }
}
```

Section:

Name	Data type	Allowed / Value	Default Value
automatic	Boolean		False
interval	Integer	5、10、15、30、60、120 min	60
server1	String	Provide the IPv4 or IPv6 address of a NTP server.	
srver2	String	Provide the IPv4 or IPv6 address of a NTP server.	
srver3	String	Provide the IPv4 or IPv6 address of a NTP server.	
srver4	String	Provide the IPv4 or IPv6 address of a NTP server.	
srver5	String	Provide the IPv4 or IPv6 address of a NTP server.	

24. Get Syslog Server

URL: /api/get_syslog_server

Method: GET

Request JSON: null

Response JSON:

```
{
        "system":{
            "syslog":{
                "mode": false,
                "server_address": "",
                "server_port": 514
            }
        }
}
```

25. Set Syslog Server

URL: /api/set_syslog_server

Method: POST

Request JSON:

```
{
        "system":{
            "syslog":{
                "mode": true,
                "server_address": "192.168.111.188",
                "server_port": 514
            }
        }
}
```

Response JSON:

```
{
        "system":{
            "syslog":{
                "mode": true,
                "server_address": "192.168.111.188",
                "server_port": 514
            }
        }
}
```

Section:

Name	Data type	Allowed / Value	Default Value
mode	Boolean		false
server_address	String	<IPv4 address>	
server_port	Integer	1-65535	514

26. Get Vlan Config

URL: /api/get_vlan_config

Method: GET

Request JSON: null

Response JSON:

```
{
    "vlan": {
        "allowed_access_vlans": "1",
        "ethertype_custom_s_ports": "88a8"
    },
    "ports": [{
        "id": 1,
        "vlan": {
            "mode": "Access",
            "access": {
                "pvid":     1,
                "forbidden_vlan": "3,5"
            },
            "trunk": {
                "pvid": 1,
                "egress_tagging": "Untag Port VLAN",
                "allowed_vlan": "1",
                "forbidden_vlan": ""
            },
            "hybrid": {
                "pvid": 1,
                "port_type": "C-Port",
                "ingress_filter": false,
                "ingress_accept": "Tagged and Untagged",
                "egress_tagging": "Untag Port VLAN",
                "allowed_vlan": "1",
                "forbidden_vlan": ""
            }
        }
    },
    … …
    ]
}
```

27. Set Vlan Config

URL: /api/set_vlan_config

Method: POST

Request JSON:

```
{
    "vlan": {
        "allowed_access_vlans": "1",
        "ethertype_custom_s_ports": "88a8"
    },
    "ports": [{
        "id": 2,
        "vlan": {
            "mode": "Access",
            "access": {
                "pvid":     1,
                "forbidden_vlan": "3,5"
            }
        }
    },{
        "id": 3,
        "vlan": {
            "mode": "Trunk",
            "trunk": {
                "pvid": 1,
                "egress_tagging": "Untag Port VLAN",
                "allowed_vlan": "1",
                "forbidden_vlan": "3,5"
            }
        }
    },{
        "id": 4,
        "vlan": {
            "mode": "Hybrid",
            "hybrid": {
                "pvid": 1,
                "port_type": "C-Port",
                "ingress_filter": false,
                "ingress_accept": "Tagged and Untagged",
                "egress_tagging": "Untag Port VLAN",
                "allowed_vlan": "1",
                "forbidden_vlan": "3-5"
            }
        }
    },
    … …
    ]
}
```

Response JSON:


```
{
    "vlan": {
        "allowed_access_vlans": "1",
        "ethertype_custom_s_ports": "88a8"
    },
    "ports": [{
        "id": 1,
        "vlan": {
            "mode": "Access",
            "access": {
                "pvid":     1,
                "forbidden_vlan": "3,5"
            },
            "trunk": {
                "pvid": 1,
                "egress_tagging": "Untag Port VLAN",
                "allowed_vlan": "1",
                "forbidden_vlan": "3,5"
            },
            "hybrid": {
                "pvid": 1,
                "port_type": "C-Port",
                "ingress_filter": false,
                "ingress_accept": "Tagged and Untagged",
                "egress_tagging": "Untag Port VLAN",
                "allowed_vlan": "1",
                "forbidden_vlan": "3,5"
            }
        }
    },
    … …
    ]
}
```


Section:

Name	Data type	Allowed / Value	Default Value
allowed_access_vlans	String	<port-list>	1
ethertype_custom_s_ports	String	<Ethertype>	88a8
id	Integer	<Port number>	
mode	String	"Access"、"Trunk"、"Hybrid"	Access
pvid	Integer	1-4095	1
port_type	String	"UNAWARE" "C-Port" "S-Port" "S-Custom-Port"	C-Port
ingress_filter	Boolean		false
ingress_accept	String	"Tagged and Untagged"	Tagged and

		"Tagged only" "Untagged only"	Untagged
egress_tagging (in trunk)	String	"Untag Port VLAN" "Tag All"	Untag Port VLAN
egress_tagging (in hybrid)	String	"Untag Port VLAN" "Tag All" "Untag All"	Untag Port VLAN
allowed_vlan	String	<vlan-list>	1
forbidden_vlan	String	<vlan-list>	

28. Get Mac Based VLAN

URL: /api/get_mac_based_vlan

Method: GET

Request JSON: null

Response JSON:

```
{
    "vlan":{
        "mac_based_vlan": [{
            "mac": "00-11-22-33-44-55",
            "vid": 15,
            "members": "2,5-6"
        }
        … …
        ]
    }
}
```

29. Get IP Address

URL: /api/get_ip_address

Method: GET

Request JSON: null

Response JSON:

```
{
    "system": {
        "ip": {
            "interfaces": [{
              "vid": 1,
                "ipv4": {
                    "dhcp": false,
                    "fallback": 0,
                    "current_lease": "192.168.111.126/24",
                    "static_addr": "192.168.111.126",
                    "static_mask": 24
                },
                "ipv6": {
                    "static_addr": "",
                    "static_mask": 0
                }
            }
            … …
            ]
        }
    }
}
```

30. Set IP Address

URL: /api/set_ip_address

Method: POST

Request JSON:

```
{
    "system": {
        "ip": {
            "interfaces": [{
                "vid": 1,
                "ipv4": {
                    "dhcp": false,
                    "fallback": 0,
                    "static_addr": "192.168.111.126",
                    "static_mask": 24
                },
                "ipv6": {
```

```
                    "static_addr": "",
                    "static_mask": 0
                }
            }
            … …
            ]
        }
    }
}
```

Response JSON:

```
{
    "system": {
        "ip": {
            "interfaces": [{
                "vid": 1,
                "ipv4": {
                    "dhcp": false,
                    "fallback": 0,
                    "current_lease": "192.168.111.126/24",
                    "static_addr": "192.168.111.126",
                    "static_mask": 24
                },
                "ipv6": {
                    "static_addr": "",
                    "static_mask": 0
                }
            }
            … …
            ]
        }
    }
}
```

Section:

Name	Data type	Allowed / Value	Default Value
dhcp	Boolean		
fallback	Integer	1-4294967295	
ipv4: static_addr	String	<ipv4 address>	
ipv4: static_mask	Integer	1-30	
ipv6: static_addr	String	<ipv6 address>	
ipv6: static_mask	Integer	1-128	

31. Get Mirror Config

URL: /api/get_mirror_config

Method: GET

Request JSON: null

Response JSON:

```
{
   "system": {
      "mirror": [{
         "destination_port": 2,
         "source_tx": "4,6-8",
         "source_rx": "3,5,7-8"
      }]
   }
}
```

32. Set Mirror Config

URL: /api/set_mirror_config

Method: POST

Request JSON:

```
{
   "system": {
      "mirror": [{
         "destination_port": 2,
         "source_tx": "4,6-8",
         "source_rx": "3,5,7-8"
      }]
   }
}
```

Response JSON:

```
{
   "system": {
      "mirror": [{
         "destination_port": 2,
         "source_tx": "4,6-8",
         "source_rx": "3,5,7-8"
      }]
   }
}
```

Section:

Name	Data type	Allowed / Value	Default Value
destination_port	Integer	<port number>，0 means disable	0
source_tx	String	<port list>	
source_rx	String	<port list>	

33. Cable Diagnostic

URL: /api/cable_diagnostics

Method: POST

Request JSON:

```
{
      "cable": {
            "port": 5
      }
}
```

Response JSON:

```
{
          "ports": {
                    "id": 5,
                    "cable_diagnostic": {
                              "link": "Link Down",
                              "result": "Abnormal",
                              "length": "24"
                    }
          }
}
```

Name	Data type	Allowed / Value	Default Value
port	Integer	<port number>	

34. Device List Table

URL: /api/dev_list_table

Method: GET

Request JSON: null

Response JSON:


```
{
        "device_list_table":
        [{
            "switch_mac" : "00-C0-F2-47-A6-F8",
            "device_list" :
            [{
                "poe_used": 0,
                "status": "on",
                "device_type": "SWITCH",
                "model_name": "SM8TAT2SA",
                "device_name": "Switch C",
                "mac": "00-C0-F2-47-A6-FA",
                "ip_addr": "192.168.90.5",
                "rx_rate": 1024,
                  "port_no" : 6,
                "link_partner_port_no": 1,
                "events":
        [{
          "date":"2010-01-01",
          "time":"23 51",
          "message":"Higher than maximum throughput limit"
        },
        {
          "date":"2010-01-01",
          "time":"23 52",
          "message":"Higher than maximum throughput limit"
        }],
        "number_of_alarm_events": 2
    },
    {
                "poe_used": 0,
                "status": "on",
                "device_type": "SWITCH",
                "model_name": "SM8TAT2SA",
                "device_name": "Switch B",
                "mac": "00-C0-F2-47-A6-F9",
                "ip_addr": "192.168.90.4",
                "rx_rate": 1024,
                "port_no" : 10,
                "link_partner_port_no": 2,
                "events":[],
                "number_of_alarm_events": 0
```

```
    },
    {
            "poe_used": 34,
            "status": "on",
            "device_type": "Camera",
            "model_name": "AXIS Camera",
            "device_name": "Camera A",
            "mac": "00-40-8C-7D-81-9A",
            "ip_addr": "192.168.90.203",
            "rx_rate": 1024,
            "port_no" : 26,
            "link_partner_port_no": 0,
            "events":[],
            "number_of_alarm_events": 0
    }],
            "switch_addr" : "192.168.90.3",
            "device_name" : "Switch A"
        }]
}
```


Section:

Name	Data type	Unit
poe_used	Integer	0.1 watt
rx_rate	Integer	byte

35. Ping

URL: /api/ping

Method: POST

Request JSON:

```
{
        "ping": {
                "host" : "192.168.1.1",
                "version" : 4,
                "count" : 5,
                "length" : 56,
                "vlan" : 1 ,
                "interval" : 1
        }
}
```

Note: get action status used "Get Ping Status".

Response JSON:

```
{
    "response":{
        "status":"success",
        "message":""
    }
}
```

Section:

Name	Data type	Allowed / Value	Default Value
host	String	<IPv4 Address> <IPv6 Address> <Host Name>	
version	Integer	4 : "host" is <IPv4 Address>、<Host Name> 6 : "host" is <IPv6 Address>	4
count	Integer	1-60	5
length	Integer	2-1452 Bytes	56
vlan	Integer	<Vlan ID> (Note : "host" is <IPv6 Address> used.)	1

36. Get Ping Status

URL: /api/get_ping_status

Method: GET

Request JSON: null

Response JSON:

```
{
        "ping": {
                "status": "done",
          "message": "PING server 192.168.111.183, 56 bytes of data.\nrecvfrom: Operation timed out\nrecvfrom:
          Operation timed out\ nrecvfrom: Operation timed out\ nrecvfrom: Operation timed out\ nrecvfrom:
          Operation timed out\ nSent 5 packets,received 0 OK, 0 bad\ n "
        }
}
```

Section:

Name	Data type	Allowed / Value
status	String	"start"、"processing"、"done"

37. Traceroute

URL: /api/traceroute

Method: POST

Request JSON:

```
{
        "traceroute": {
                "host" : "192.168.1.1",
                "version" : 4,
                "ip_protocol" : "ICMP",
                "wait_time" : 5,
                "max_ttl" : 5,
                "count" : 3
        }
}
```

Note: get action status used "Get Traceroute Status".

Response JSON:

```
{
    "response":{
        "status":"success",
        "message":""
    }
}
```

Section:

Name	Data type	Allowed / Value	Default Value
host	String	<IPv4 Address> <IPv6 Address> <Host Name>	
version	Integer	4 : "host" is <IPv4 Address>、<Host Name> 6 : "host" is <IPv6 Address>	4
ip_protocol	String	"ICMP"、"UDP"、"TCP	ICMP
wait_time	Integer	1-60	5
max_ttl	Integer	1-255	30
count	Integer	1-10	3

38. Get Traceroute Status

URL: /api/get_traceroute_status

Method: GET

Request JSON: null

Response JSON:

```
{
        "traceroute": {
                "status": "done",
                 "message": "traceroute to 192.168.1.1 (192.168.1.1), 5 hops max, 140 byte packets\n 1 * *
                  *\n 2 * * *\n 3 * * *\n 4 * * * \n 5 * * * \n"
        }
}
```

Section:

Name	Data type	Allowed / Value
status	String	"start"、"processing"、"done"

39. Activate Config

URL: /api/activate_config

Method: POST

Request JSON:

```
{
        "system": {
                "config": {
                        "activate_file": "startup-config"
                }
        }
}
```

Response JSON:

```
{
        "response": {
                "status": "success",
                "message": ""
        }
}
```

Section:

Name	Data type	Allowed / Value	Default Value	Note
activate_file	String	<File Name>		Special Filename: "default-config" "startup-config"

40. Get DI DO Config

URL: /api/get_di_do_config

Method: GET

Request JSON: null

Response JSON:

```
{
        "system": {
                "di_do": {
                        "digital_out_mode": false,
                        "di_normal_mode": "High",
                        "do_normal_mode": "Open"
                }
        }
}
```

41. Set DI DO Config

URL: /api/set_di_do_config

Method: POST

Request JSON:

```
{
        "system": {
                "di_do": {
                        "digital_out_mode": false,
                        "di_normal_mode": "High",
                        "do_normal_mode": "Open"
                }
        }
}
```

Response JSON:

```
{
        "system": {
                "di_do": {
                        "digital_out_mode": false,
                        "di_normal_mode": "High",
                        "do_normal_mode": "Open"
                }
        }
}
```

Section:

Name	Data type	Allowed / Value	Default Value
digital_out_mode	Boolean		false
di_normal_mode	String	"Low"、"High"	High
do_normal_mode	String	"Open"、"Close"	Open

Note: digital_out_mode means Trap Event Severity Configuration > DI-1-Abnormal > Digital Out mode.

42. Get DI DO Status

URL: /api/get_di_do_status

Method: GET

Request JSON: null

Response JSON:

```
{
        "system": {
                "di_do": {
                        "di_status": "Normal",
                        "do_status": "Normal"
                }
        }
}
```

43. Set DO Relay

URL: /api/set_di_do_relay

Method: GET

Request JSON: null

Response JSON:

```
{
        "system": {
                "di_do": {
                        "do_relay_status": true
                }
        }
}
```

44. Get SNMP Trap Config

URL: /api/get_snmp_trap_config

Method: GET

Request JSON: null

Response JSON:


```
{
        "snmp": {
                "trap": [{
                        "name": "123",
                        "mode": "Disabled",
                        "version": "SNMPv2c",
                        "community": "public",
                        "dest_addr": "0.0.0.0",
                        "dest_port": 162,
                        "probe_engine_id": false,
                        "secu_engine_id": "80001455030040c7000000",
                        "secu_name": "None"
            },
            … … …
            ]
        }
}
```


45. Add SNMP Trap Config

URL: /api/add_snmp_trap_config

Method: POST

Request JSON:


```
{
        "snmp": {
                "trap": {
                        "add": [{
                                "name": "test123",
                                "mode": "UDP",
                                "version": "SNMP v3",
                                "community": "public",
                                "dest_addr": "123.123.123.123",
                                "dest_port": 55,
                                "secu_engine_id": "7788",
                                "secu_name": "None"
                        }]
                }
        }
}
```

Response JSON:


```
{
        "snmp": {
                "trap_mode": false,
                "trap": [{
                        "name": "test123",
                        "mode": "UDP",
                        "version": "SNMPv3",
                        "community": "public",
                        "dest_addr": "123.123.123.123",
                        "dest_port": 55,
                        "secu_engine_id": "7788",
                        "secu_name": "None"
                }]
        }
}
```


Section:

Name	Data type	Allowed / Value	Default Value
name	String	length is 1 to 32, the allowed content is ASCII characters from 33 to 126	
mode	String	"TCP"、"UDP"、"Disabled"	Disabled
version	String	"SNMP v1"、"SNMP v2c"、"SNMP v3"	SNMP v2c
community	String	length is 0 to 255, the allowed content is ASCII characters from 33 to 126	
dest_addr	String	<IPv4 Address> <IPv6 Address> <Host Name>	
dest_port	Integer	1~65535	162
secu_engine_id	String	contain an even number(in hexadecimal format) with number of digits between 10 and 64, but all-zeros and all-'F's are not allowed.	
secu_name	String		None

46. Delete SNMP Trap Config

URL: /api/del_snmp_trap_config

Method: POST

Request JSON:

```
{
        "snmp": {
                "trap": {
                        "delete": [{
                                "name": "test123"
                        }]
                }
        }
}
```

Response JSON:

```
{
        "snmp": {
                "trap": []
        }
}
```

Section:

Name	Data type	Allowed / Value	Default Value
name	String	length is 1 to 32, the allowed content is ASCII characters from 33 to 126	

47. Get System Log

URL: /api/get_syslog

Method: GET

Request JSON: null

Response JSON:

```
{
        "system": {
                "syslog": {
                        "log": [{
                                "id": 1,
                                "level": "Warning",
                                "time": "2011-01-01T00:00:12+00:00",
                                "message": "DI 1 change to abnormal"
                },
              … … …
                ]
                }
        }
}
```

Note: Only get the latest 100 entries.

48. Clear System Log

URL: /api/clear_syslog

Method: GET

Request JSON: null

Response JSON:

```
{
        "system": {
                "syslog": {
                        "log": []
                }
        }
}
```

49. Get SFP Port Detail

URL: /api/get_sfp_port_detail

Method: GET

Request JSON: null

Response JSON:


```
{
        "ports": [{
                "id": "11",
                "sfp": {
                        "connector_type": "SFP or SFP Plus - LC",
                        "fiber_type": "Reserved",
                        "tx_central_wavelength": "850",
                        "bit_rate": "10 Gbps",
                        "vendor_oui": "00-17-2d",
                        "vendor_name": "Axcen Photonics",
                        "vendor_pn": "AXXE-5886-05B3",
                        "vendor_revision": "V1.0",
                        "vendor_serial_number": "AX20240007781",
                        "date_code": "200612",
                        "temperature": "46.41 C",
                        "vcc": "3.34 V",
                        "mon1_bias": "8 mA",
                        "mon2_tx_pwr": "-2.09 dBm",
                        "mon3_rx_pwr": "none"
                }
        }]
}
```


Note: Only get the info with port inserted module.

50. Import Config

URL: /api/import_config

Method: POST

Request JSON:

```
{
        "system": {
                "config": {
                        "import_url": "http://192.168.111.1/config.txt",
                        "params": "Replace"
                }
        }
}
```

Response JSON:

```
{
    "response":{
        "status":"success",
        "message":""
    }
}
```

Section:

Name	Data type	Allowed / Value	Default Value
import_url	String	<URL>	
params	String	"Replace"、" Merge"	Replace

51. Export Config

URL: /api/export_config

Method: POST

Request JSON:

```
{
        "system": {
                "config": {
                        "export_url": "http://192.168.111.1"
                }
        }
}
```

Response JSON:

```
{
    "response":{
        "status":"success",
        "message":""
    }
}
```

Section:

Name	Data type	Allowed / Value	Default Value
export_url	String	<URL>	

52. Get Config Action Status

URL: /api/get_config_action_status

Method: GET

Request JSON: null

Response JSON:

```
{
   "system": {
         "config": {
               "config_file_status": "The device has been import config successfully."
          }
   }
}
```

Section:

Name	Data type	Allowed / Value
config_file_status	String	Never updated
		The device has been import config successfully.
		Error: Failed to import config file.
		The device has been export config successfully.
		Error: Failed to export config file.

API cURL commands v _ . _

To be supplied.

Record of Revisions

Rev.	Date	Description
A	5/14/21	Initial preliminary release at FW v8.50.0030.

Diffs:

Parameter	SM24TAT4XB	SM48TAT4XA-RP
model_name	SM24TAT4XB	SM48TAT4XA-RP
description	24-port Gigabit PoE+ with (4) 1G/10G SFP+ slots, 370 Watts PoE budget	Managed PoE+ Switch, 48-port 10/100/1000Base-T PoE Plus + (4) 1G/10G SFP+ slots
system_name	SM24TAT4XB	SM48TAT4XA-RP
firmware_version	v8.50.0030	v8.50.0030

Note: minimum version of firmware required:

- SM24TAT4XB FW v8.50.0030
- SM48TAT4XA-RP FW v8.50.0030