SM24TBT2DPA API

User Guide

PN 33822 Rev. B

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1. Login

URL: /api/login

Method: POST

Request JSON:

```
{
	"login": {
		"username" : "admin",
		"password" : "admin",
		"user_ip":"192.168.1.77",
		"sessid": "123456789"
	}
}
```

Response JSON:

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

Section:

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

2. Logout

URL: /api/logout

Method: POST

Request JSON:

```
{
        "logout": {
            "sessid": "123456789"
        }
}
```

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":  "SM24TBT2DPA",
            "description":  "Managed Switch, 24-port Gigabit PoE++, 2-port SFP/RJ-45 Combo",
            "hardware_version":    "v1.02",
            "mechanical_version":  "v1.01",
            "firmware_version":    "VB6.54.3576 2020-09-18",
            "mac_addr":    "00-11-22-33-44-55",
            "serial_number":      "A137120BR2500142",
            "system_name":  "SM24TBT2DPA",
            "location":    "",
            "contact":     "",
            "system_date":  "2011-01-01T00:01:50+00:00",
            "uptime":      "00:01:50",
            "cpu_load":    "0%, 10%, 15%",
            "ram":  {
                "total":      "71696 KBytes",
                "free": "48284 KBytes"
            }
        }
    }
}*
```


Section:

Name	Data type	Allowed / Value	Default Value
System_name	String	0-128 alphanumeric	
location	String	0-128 alphanumeric	
contact	String	0-128 alphanumeric	

5. Set System Information

URL: /api/set_sysinfo

Method: POST

Request JSON:

```
{
        "system": {
            "information": {
                "system_name": "SM24TBT2DPA",
                "location": "Minnetonka",
                "contact": "Tech Support"
            }
        }
}
```

Response JSON:

```
{
        "system": {
            "information": {
                "system_name": "SM24TBT2DPA",
                "location": "Minnetonka",
                "contact": "Tech Support"
            }
        }
}
```

Section:

Name	Data type	Allowed / Value	Default Value
System_name	String	0-128 alphanumeric	
location	String	0-128 alphanumeric	
contact	String	0-128 alphanumeric	

6. Get PoE Status

URL: /api/get_poe_status

Method: GET

Request JSON: null

Response JSON:

```
{
        "poe": {
              "total_power_allocate": 0,
              "total_power_used": 0,
              "total_current_used": 0
        },
        "ports":[{
              "id": 1,
              "poe":{
                    "pd_class": "-",
                    "priority": "Low",
                    "port_status": "No PD detected",
                    "power_allocate": 0,
                    "power_used": 0,
                    "current_used": 0
              }
        },
        … … …
        ]
}
```

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": {
          "total_power_watts":   820
     },
     "ports":      [{
               "id":   1,
               "poe": {
                    "mode": "8023bt",
                    "priority":    "Low",
                    "schedule":    "Disabled",
                    "lldp": true,
                    "legacy":      true
               }
          }]
}*
```

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:

```
{
        "ports": [
        {
              "id": 1,
              "poe":{
                    "mode": "8023bt",
                    "priority": "Low",
                    "schedule": "Disabled",
                    "lldp": true,
                    "legacy": true
              }
        },
        … … …
        ]
}
```

Response JSON:

```
{
        "poe": {
              "total_power_watts": 2000
        },
        "ports": [
        {
              "id": 1,
                    "poe":{
                    "mode": "8023bt",
                    "priority": "Low",
                    "schedule": "Disabled",
                    "lldp": true,
                    "legacy": true
              }
        },
        … … …
        ]
}
```

Section:

Name	Data type	Allowed / Value	Default Value
id	Integer	<Port number>	
mode	String	"Disabled"、"4pair60w"、"4pair90w"、"8023bt"	8023bt
priority	String	"Low"、"High"、"Critical"	Low

schedule	Stringh	"Disabled"、<Profile Name>	Disabled
lldp	Boolean		true
legacy	Boolean		false

9. Get PoE Auto Power Reset

URL: /api/get_poe_auto_reset

Method: GET

Request JSON: null

Response JSON:

```
{
        "poe": {
            "auto_checking": false,
        },
        "ports": [
        {
            "id": 1,
            "poe_auto_reset":{
                "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	

10. Set PoE Auto Power Reset

URL: /api/set_poe_auto_reset

Method: POST

Request JSON:

```
{
        "poe": {
            "auto_checking": false,
        },
        "ports": [
        {
            "id": 1,
            "poe_auto_reset":{
                "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": {
            "auto_checking": false,
        },
        "ports": [
        {
            "id": 1,
            "poe_auto_reset":{
                "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
auto_checking	Boolean		false
id	Integer	<Port number>	
ip	String	"<ip4 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_bytes": {
                            "all": 93536,
                            "octets": 11676072,
                            "unicast": 44332,
                            "multicast": 37536,
                            "broadcast": 11672,
                            "discard": 26816,
                            "64 bytes": 55171,
                            "65-127 bytes": 6235,
                            "128-255 bytes": 5317,
                            "256-511 bytes": 5841,
                            "512-1023 bytes": 3493,
                            "1024-1518 bytes": 1,
                            "1519-max bytes": 0,
                            "drop": 26816,
                            "crc_alignment": 0,
                            "oversize": 0,
                            "undersize": 0,
                            "fragments":
                            "jabber": 0
        },
                    "tx_bytes": {
                            "all": 130311,
                            "octets": 14036132,
                            "unicast": 9516,
                            "multicast": 1123,
                            "broadcast": 119672,
                            "discard": 0,
                            "64 bytes": 77115,
                            "65-127 bytes": 9511,
                            "128-255 bytes": 336,
                            "256-511 bytes": 302,
                            "512-1023 bytes": 1251,
                            "1024-1518 bytes": 2668,
                            "1519-max bytes": 0,
                            "drop": 0,
                            "late_collision": 0,
```

```
                    "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" "SFP_Auto_AMS" "100-FX" "100-FX_AMS"	Auto

		"1000-X" "1000-X_AMS"	
flow_control	Boolean		false
jumbo_frames	Integer	1518-9600	9600
description	String	0-63 alphanumeric	

14. Firmware Upgrade

URL: /api/firmware_upgrade

Method: POST

Request JSON:

```
{
        "system": {
                "firmware": {
                        "upgrade_url": http://192.168.1.77/test.tar.gz"
                }
        }
}
```

```
{
        "system": {
                "firmware": {
                        "upgrade_url":"http://192.168.1.77/test.tar.gz"
                }
        }
}
```

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" : "admin",
                "privilege_level" : 15
        },
        … …
        ]
}
```

17. Set Account Configuration

URL: /api/set_account_config

Method: POST

Request JSON:

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

Response JSON:

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

Section: **Note**: Only modify one at a time.

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

18. Get MAC Table Information

URL: /api/get_dynamic_mac_table

Method: GET

Request JSON: null

Response JSON:

```
{
        "mac_table": [{
             "type": "Dynamic",
            "mac": "11-22-33-44-55-66",
            "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": "Use Local Settings",
            "system_date":  "2011-01-01 01:17:39",
            "time_zone":   "  00",
            "acronym":    "",
            "daylight":   {
                "mode": "disable",
                "offset":     1,
                "start_time":  {
                    "year": 0,
                    "month":      "Jan",
                    "week": 0,
                    "day":  "Mon",
                    "date": 0,
                    "hour": 0,
                    "minute":     0
                },
                "end_time":   {
                    "year": 0,
                    "month":      "Jan",
                    "week": 0,
                    "day":  "Mon",
                    "date": 0,
                    "hour": 0,
                    "minute":     0
                }
            }
        }
    }
}
```

21. Set System Time

URL: /api/set_system_time

Method: POST

Request JSON:

```
{
    "system":    {
        "time": {
            "clock_source": "Use Local Settings",
            "system_date":  "2020-09-15 15:31:30",
            "time_zone":   "5400",
            "acronym":    "",
            "daylight":   {
                "mode": "disable",
                "offset":    60,
                "start_time":  {
                    "year": 1,
                    "month":      "Jan",
                    "week": 1,
                    "day":  "Mon",
                    "date": 1,
                    "hour": 1,
                    "minute":     1
                },
                "end_time":   {
                    "year": 1,
                    "month":      "Jan",
                    "week": 1,
                    "day":  "Mon",
                    "date": 1,
                    "hour": 1,
                    "minute":     1
                }
            }
        }
    }
}
```

Response JSON:

```
{
    "system":    {
        "time": {
            "clock_source": "Use Local Settings",
            "system_date":  "2020-09-15 15:31:30",
            "time_zone":   "5400",
            "acronym":    "",
            "daylight":   {
                "mode": "disable",
                "offset":    60,
                "start_time":  {
```

```
                    "year": 1,
                    "month":    "Jan",
                    "week": 1,
                    "day":  "Mon",
                    "date": 1,
                    "hour": 1,
                    "minute":   1
                },
                "end_time":   {
                    "year": 1,
                    "month":    "Jan",
                    "week": 1,
                    "day":  "Mon",
                    "date": 1,
                    "hour": 1,
                    "minute":   1
                }
            }
        }
    }
}*
```


Section:

Name	Data type	Allowed / Value	Default Value
clock_source	String	"Use Local Setting"、"NTP Server"	Local Setting
system_date	String	"[Year]-[Month]-[Day] [Hour]:[Minute]:[Second]"	
time_zone	String	Reference "Time Zone Mapping Table"	
acronym	String	0-16 alphanumeric	
mode	Boolean		disable
offset	Integer	1-720 Min	60
year	Integer	“”	1
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
hour	Integer	1-23	0
minute	Integer	1-59	1

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":   false,
            "interval":    60,
            "server1":     "",
            "server2":     "",
            "server3":     "",
            "server4":     "",
            "server5":     ""
        }
    }
}
```

23. Set NTP Server

URL: /api/set_ntp_server

Method: POST

Request JSON:

```
{
    "system":    {
        "ntp": {
            "automatic":   true,
            "interval":    60,
            "server1":     "192.168.1.1",
            "server2":     "",
            "server3":     "",
            "server4":     "",
            "server5":     ""
        }
    }
}*
```

Response JSON:

```
{
    "system":    {
        "ntp": {
            "automatic":   false,
            "interval":    60,
            "server1":     "",
            "server2":     "",
            "server3":     "",
            "server4":     "",
            "server5":     ""
        }
    }
}
```

Section:

Name	Data type	Allowed / Value	Default Value
id	Integer	1-6	
host	String	<IPv4 address>	
ntp_interval	Integer	5、10、15、30、60、120 min	60

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": false,
            "server_address":    "",
            "server_port":  514
        }
    }
}
```

Response JSON:

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

Section:

Name	Data type	Allowed / Value	Default Value
mode	Boolean		false
server_address	String	<IPv4 address>	**address**
server_port	Integer	1-49151	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
                },
                "trunk": {
                        "pvid": 1,
                        "egress_tagging": "Untag Port VLAN",
                        "allowed_vlan": "1"
                },
                "hybrid": {
                    "pvid": 1,
                    "port_type": "C-Port",
                    "ingress_filter": false,
                    "ingress_accept": "Tagged and Untagged",
                    "egress_tagging": "Untag Port VLAN",
                    "allowed_vlan": "1"
                }
            }
        },
        … …
        ]
}
```

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":  1,
            "vlan": {
                "mode": "Access",
                "access":    {
                    "pvid": 1,
                    "forbidden_vlan":    ""
                },
                "trunk":    {
                    "pvid": 1,
                    "egress_tagging":    "Untag Port VLAN",
                    "allowed_vlan": "1-4095",
                    "forbidden_vlan":    ""
                },
                "hybrid":    {
                    "pvid": 1,
                    "port_type":   "C-Port",
                    "ingress_filter":    false,
                    "ingress_accept":    "Tagged and Untagged",
                    "egress_tagging":    "Untag Port VLAN",
                    "allowed_vlan": "1-4095",
                    "forbidden_vlan":    ""
                }
            }
        },
}
```

Response JSON:

```
{
    "vlan": {
        "allowed_access_vlans": "1",
        "ethertype_custom_s_ports":    "88a8"
    },
    "ports":    [{
            "id":  1,
            "vlan": {
                "mode": "Access",
                "access":    {
                    "pvid": 1,
```

```
                    "forbidden_vlan":     ""
                },
                "trunk":     {
                    "pvid": 1,
                    "egress_tagging":     "Untag Port VLAN",
                    "allowed_vlan": "1-4095",
                    "forbidden_vlan":     ""
                },
                "hybrid":     {
                    "pvid": 1,
                    "port_type":   "C-Port",
                    "ingress_filter":     false,
                    "ingress_accept":     "Tagged and Untagged",
                    "egress_tagging":     "Untag Port VLAN",
                    "allowed_vlan": "1-4095",
                    "forbidden_vlan":     ""
                }
            }
        },
}
```


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
pv_id	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 only" "Untagged only"	Tagged and 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 Config

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
            }
            … …
            ]
        }
}
```

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":      "192.168.1.77/24",
                        "static_addr":  "192.168.1.77",
                        "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,
                        "current_lease":      "192.168.1.76/24",
                        "static_addr":  "192.168.1.76",
                        "static_mask":  24
                    },
                    "ipv6": {
                        "static_addr":  "",
                        "static_mask":  0
                    }
                }]
        }
    }
}
```

Response JSON:

```
{
    "system":    {
        "ip":  {
            "interfaces":  [{
                    "vid":  1,
                    "ipv4": {
                        "dhcp": false,
                        "fallback":    0,
                        "current_lease":      "192.168.1.76/24",
                        "static_addr":  "192.168.1.76",
                        "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":    0,
            "source_tx":    "",
            "source_rx":    ""
        }
    }
}*
```

Note: This configuration is based on the SM24TBT2DPA chip function.

32. Set Mirror Config

URL: /api/set_mirror_config

Method: POST

Request JSON:

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

Response JSON:

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

Section:

Name	Data type	Allowed / Value	Default Value
session	Integer	1	1
enable	Boolean		false
destination_port	Integer	<port number>	1
source_tx	String	<port list>	
source_rx	String	<port list>	

Note: This configuration is based on the SM24TBT2DPA chip function.

33. Cable Diagnostic

URL: /api/cable_diagnostics

Method: POST

Request JSON:

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

Response JSON:

```
{
        "ports": [
              "id": 7,
              "cable_diagnostic": {
                    "link": "1G",
                    "result": "OK",
                    "length": "6.00 (m)"
              }
        ]
}
```

Section:

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

Note: This configuration is based on the SM24TBT2DPA chip function.

34. Device List Table

URL : /stat/dev_list_table

Method: GET

Request JSON: null

Response JSON Example:


```
<
{
    "device_list_table":   [{
            "switch_mac":  "00-c0-f2-7d-eb-27",
            "device_list":  [{
                    "poe_used":    0,
                    "status":      "on",
                    "device_type":  "PC",
                    "model_name":   "General PC",
                    "device_name":  "f852b842-c121-4abd-95e3-aa0691706f31",
                    "mac":  "b4-b6-86-37-c3-8f",
                    "ip_addr":     "192.168.1.253",
                    "rx_rate":     900,
                    "port_no":     1,
                    "link_partner_port_no": 0,
                    "events":      [],
                    "number_of_alarm_events":      0
                }],
            "switch_addr":  "192.168.1.77",
            "device_name":  "SM24TBT2DPA"
        }]
}*
```

35. Get SNMP Trap Config

URL: /api/get_snmp_trap_config

Method: GET

Request JSON: null

Response JSON:


```
{
        "snmp": {
            "trap_mode": false,
            "trap": [{
                "name": "123",
                "mode": "Disabled",
                "version": "SNMPv2c",
                "community": "public",
                "dest_addr": "",
                "dest_port": 162,
                "inform_mode": false,
                "inform_timeout": 3,
                "inform_retries": 5,
                "probe_engine_id": false,
                "secu_engine_id": "",
                "secu_name": "None"
            },
            … … …
            ]
        }
}
```

36. Add SNMP Trap Config

URL: /api/add_snmp_trap_config

Method: POST

Request JSON:


```
{
	"snmp": {
		"trap_mode": false,
		"trap": {
			"add": [{
				"name": "test123",
				"mode": "UDP",
				"version": "SNMP v2c",
				"community": "public",
				"dest_addr": "123.123.123.123",
				"dest_port": 55,
				"inform_mode": true,
				"inform_timeout": 10,
				"inform_retries": 10,
				"probe_engine_id": false,
				"secu_engine_id": "",
				"secu_name": "None"
			}]
		}
	}
}
```


Response JSON:


```
{
	"snmp": {
		"trap_mode": false,
		"trap": {
			"add": [{
				"name": "test123",
				"mode": "UDP",
				"version": "SNMP v2c",
				"community": "public",
				"dest_addr": "123.123.123.123",
				"dest_port": 55,
				"inform_mode": true,
				"inform_timeout": 10,
				"inform_retries": 10,
				"probe_engine_id": false,
				"secu_engine_id": "",
				"secu_name": "None"
			}]
		}
	}
}
```

Section:

Name	Data type	Allowed / Value	Default Value
trap_mode	Boolean		false
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
inform_mode	Boolean		false
inform_timeout	Integer	0-2147	3
inform_retries	Integer	0-255	5
probe_engine_id	Boolean		false
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.

37. Delete SNMP Trap Config

URL: /api/del_snmp_trap_config

Method: POST

Request JSON:

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

Response JSON:

```
{
        "snmp": {
            "trap_mode": false,
            "trap": []
        }
}
```

Section:

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

38. 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.

39. Clear System Log

URL: /api/clear_syslog

Method: GET

Request JSON: null

Response JSON:

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

40. 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.

41. 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

42. 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>	

43. 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.

cURL Commands v1.1

curl -v -d "{\"login\":{\"username\":\"admin\", \"password\": \"admin\",\"user_ip\":\"192.168.1.77\", \"sessid\":\"123456789\"}}" http://192.168.1.77/api/login

curl -v --cookie "seid=123456789" -d "{\"logout\":{\"sessid\":\"123456789\"}}" http://192.168.1.77/api/logout

curl -v --cookie "seid=123456789" -d "{\"system\":{\"warm\":\"Yes\"}}" http://192.168.1.77/api/reboot

curl -v --cookie "seid=123456789" http://192.168.1.77/api/get_sysinfo

curl -v --cookie "seid=123456789" -d "{\"system\": {\"information\": {\"system_name\": \"SM24TBT2DPA\",\"location\": \"Minnetonka\",\"contact\": \"Tech supportt\"}}}" http://192.168.1.77/api/set_sysinfo

curl -v --cookie "seid=123456789" http://192.168.1.77/api/get_poe_status

curl -v --cookie "seid=123456789" http://192.168.1.77/api/get_poe_config

curl -v --cookie "seid=123456789" -d "{\"ports\":[{\"id\":1,\"poe\":{\"mode\": \"8023bt\",\"Priority\":\"Low\",\"schedule\":\"Disabled\",\"lldp\": true,\"legacy\": true}}]}" http://192.168.1.77/api/set_poe_config

curl -v --cookie "seid=123456789" http://192.168.1.77/api/get_port_statistics

curl -v --cookie "seid=123456789" http://192.168.1.77/api/get_port_config

curl -v --cookie "seid=123456789" -d "{\"ports\": [{\"id\": 1,\"speed_mode\": \"Auto\",\"flow_control\": false,\"jumbo_frames\": 9600,\"description\": \"test\"}]}" http://192.168.1.77/api/set_port_config

curl -v --cookie "seid=123456789" -d "{\"system\": {\"firmware\": {\"upgrade_url\":\"http://192.168.5.46/test.tar.gz\"}}}" http://192.168.1.77/api/firmware_upgrade

curl -v --cookie "seid=123456789" http://192.168.1.77/api/get_firmware_upgrade_status

curl -v --cookie "seid=123456789" http://192.168.1.77/api/get_account_config

curl -v --cookie "seid=123456789" -d "{\"account\": {\"status\" : \"NEW\",\"username\" : \"superuser\",\"password\" : \"superuser\",\"privilege_level\" : 15}}" http://192.168.1.77/api/set_account_config

curl -v --cookie "seid=123456789" http://192.168.1.77/api/get_dynamic_mac_table

curl -v --cookie "seid=123456789" http://192.168.1.77/api/save_configuration

curl -v --cookie "seid=123456789" http://192.168.1.77/api/get_system_time

curl -v --cookie "seid=123456789" -d "{\"system\": {\"time\": {\"clock_source\":\"Local Setting\",\"system_date\":\"2001-09-13 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}}}}}" http://192.168.1.77/api/set_system_time

curl -v --cookie "seid=123456789" http://192.168.1.77/api/get_ntp_server

curl -v --cookie "seid=123456789" -d "{\"system\": {\"ntp\": {\"automatic\": true,\"interval\": 60,\"server1\":\"192.168.1.1\",\"server2\": \"\",\"server3\": \"\",\"server4\": \"\",\"server5\": \"\"}}}" http://192.168.1.77/api/set_ntp_server

curl -v --cookie "seid=123456789" http://192.168.1.77/api/get_syslog_server

curl -v --cookie "seid=123456789" -d "{\"system\":{\"syslog\":{\"mode\":false,\"server_address\":\"\",\"server_port\": 514}}}" http://192.168.1.77/api/set_syslog_server

curl -v --cookie "seid=123456789" http://192.168.1.77/api/get_vlan_config

curl -v --cookie "seid=123456789" -d "{ \"vlan\" : { \"allowed_access_vlans\" : 1 , \"ethertype_custom_s_ports\" : \"88a8\" }, \"ports\" : [{ \"id\" : 2, \"vlan\" : { \"mode\" : \"Access\" , \"access\" : { \"pvid\" : 1}}},{\"id\" : 3, \"vlan\" : { \"mode\" : \"Trunk\" , \"trunk\" : { \"pvid\" : 1, \"egress_tagging\" : \"Untag Port VLAN\" , \"allowed_vlan\" : \"1\" }}},{\"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 }}}]}" http://192.168.1.77/api/set_vlan_config

curl -v --cookie "seid=123456789" http://192.168.1.77/api/get_mac_based_vlan

curl -v --cookie "seid=123456789" http://192.168.1.77/api/get_ip_address

curl -v --cookie "seid=123456789" -d "{\"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}}]}}}" http://192.168.1.77/api/set_ip_address

curl -v --cookie "seid=123456789" http://192.168.1.77/api/get_mirror_config

curl -v --cookie "seid=123456789" -d "{\"system\": {\"mirror\": [{\"destination_port\": 2,\"source_tx\": \"4,6-7\",\"source_rx\": \"3,5,7\"}]}}" http://192.168.1.77/api/set_mirror_config

curl -v --cookie "seid=123456789" -d "{\"cable\": {\"port\": 5}}" http://192.168.1.77/api/cable_diagnostics

curl -v --cookie "seid=123456789" http://192.168.1.77/api/dev_list_table

Record of Revisions

Rev.	Date	Description
A	10/22/20	Initial release of SM24TBT2DPA API at FW v6.54.3576 and cURL commands v1.1.
B	6/21/21	FW VB6.64.0031: add Get/Set PoE Auto Power Reset, Get/Add/Delete SNMP Trap Config, Show/Clear System Log, Get SFP Port Detail, Import/Export Config, and Get Config Action Status. Add Export Config API command.

Note: minimum version of firmware required: v6.54.3576.