

# SMxTAT2SA Series

## Unified API User Guide

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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>	

**cURL Commands:**

```
curl -v --cookie "seid=123456789" -d '{"login":{"username":"admin", "password":"admin", "user_ip":"192.168.1.77", "sessid":"123456789"}}' http://192.168.1.77/api/login
```

```
* Trying 192.168.1.77:80...
* Connected to 192.168.1.77 (192.168.1.77) port 80 (#0)
> POST /api/login HTTP/1.1
> Host: 192.168.1.77
> User-Agent: curl/7.71.1
> Accept: */*
> Cookie: seid=123456789
> Content-Length: 98
> Content-Type: application/x-www-form-urlencoded
>
* upload completely sent off: 98 out of 98 bytes
* Mark bundle as not supporting multiuse
< HTTP/1.1 200 OK
< Access-Control-Allow-Origin: *
< Content-type: application/json; charset=utf-8
< Content-Length: 60
< Date: Sun, 01 Jan 2017 02:44:33 GMT
```

```
< Server: lighttpd/1.4.42-devel-1476
<
{
  "response": {
    "status": "success",
    "message": ""
  }
}* Connection #0 to host 192.168.1.77 left intact
```

## 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>	

**cURL Commands:**

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

* Trying 192.168.1.77:80...
* Connected to 192.168.1.77 (192.168.1.77) port 80 (#0)
> POST /api/logout HTTP/1.1
> Host: 192.168.1.77
> User-Agent: curl/7.71.1
> Accept: */*
> Cookie: seid=123456789
> Content-Length: 33
> Content-Type: application/x-www-form-urlencoded
>
* upload completely sent off: 33 out of 33 bytes
* Mark bundle as not supporting multiuse
< HTTP/1.1 200 OK
< Access-Control-Allow-Origin: *
< Content-type: application/json; charset=utf-8
< Content-Length: 43
< Date: Sun, 01 Jan 2017 02:45:03 GMT
< Server: lighttpd/1.4.42-devel-1476
<
{
  "response": {
    "status": "success"
  }
}
]* Connection #0 to host 192.168.1.77 left intact
```

### 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"	

**cURL Commands:**

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

```
* Trying 192.168.1.77:80...
* Connected to 192.168.1.77 (192.168.1.77) port 80 (#0)
> POST /api/reboot HTTP/1.1
> Host: 192.168.1.77
> User-Agent: curl/7.71.1
> Accept: */*
> Cookie: seid=123456789
> Content-Length: 25
> Content-Type: application/x-www-form-urlencoded
>
* upload completely sent off: 25 out of 25 bytes
* Mark bundle as not supporting multiuse
< HTTP/1.1 200 OK
< Access-Control-Allow-Origin: *
< Content-type: application/json; charset=utf-8
< Content-Length: 0
< Date: Sun, 01 Jan 2017 02:45:41 GMT
< Server: lighttpd/1.4.42-devel-1476
<
* Connection #0 to host 192.168.1.77 left intact
```

## 4. Get System Information

**URL:** /api/get\_sysinfo

**Method:** GET

**Request JSON:** null

**Response JSON:**

```
{
  "system": {
    "information": {
      "model_name": "SM8TAT2SA",
      "description": " Smart Managed Switch, 8-port Gigabit PoE+, 2-port 100/1000 SFP ",
      "hardware_version": "v1.01",
      "mechanical_version": "v1.01",
      "firmware_version": "v1.02.1476",
      "mac_addr": "00-40-c8-22-02-06",
      "serial_number": "152615261526",
      "system_name": "SM8TAT2SA",
      "location": "",
      "contact": "",
      "system_date": "2019-01-01 02:22:10 +0000",
      "uptime": "0 days, 2:22:25",
      "cpu_load": "18.7 %",
      "ram": {
        "total": "127520 KB",
        "free": "62996 KB"
      },
      "temperature_1": 50,
      "temperature_2": 64,
      "temperature_3": 43
    }
  }
}
```

### cURL Commands:

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

```
* Trying 192.168.1.77:80...
* Connected to 192.168.1.77 (192.168.1.77) port 80 (#0)
> GET /api/get_sysinfo HTTP/1.1
> Host: 192.168.1.77
> User-Agent: curl/7.71.1
> Accept: */*
> Cookie: seid=123456789
>
* Mark bundle as not supporting multiuse
< HTTP/1.1 200 OK
< Access-Control-Allow-Origin: *
< Content-type: application/json; charset=utf-8
```

```
< Content-Length: 643
< Date: Sun, 01 Jan 2017 00:03:30 GMT
< Server: lighttpd/1.4.42-devel-1476
<
{
  "system": {
    "information": {
      "model_name": "SM8TAT2SA",
      "description": "Smart Managed Switch, 8-port Gigabit PoE+, 2-port 100/1000 SFP",
      "hardware_version": "v1.01",
      "mechanical_version": "v1.01",
      "firmware_version": "v1.02.1476",
      "mac_addr": "00-40-C7-17-00-AA",
      "serial_number": "C020317AR4900002",
      "system_name": "SM8TAT2SA",
      "location": "",
      "contact": "",
      "system_date": "2017-01-01 00:03:29 +0000",
      "uptime": "0 days, 0:03:44",
      "cpu_load": "11.9 %",
      "ram": {
        "total": "127520 KB",
        "free": "69952 KB"
      },
      "temperature_1": 66,
      "temperature_2": 0,
      "temperature_3": 0
    }
  }
}
}* Connection #0 to host 192.168.1.77 left intact
```

## 5. Set System Information

**URL:** /api/set\_sysinfo

**Method:** POST

**Request JSON:**

```
{
  "system": {
    "information": {
      "system_name": "SM24TAT2SA",
      "location": "Test Location",
      "contact": "Test Contact"
    }
  }
}
```

**Response JSON:**

```
{
  "system": {
    "information": {
      "system_name": "SM24TAT2SA",
      "location": "Test Location",
      "contact": "Test Contact"
    }
  }
}
```

**Section:**

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

**cURL Commands:**

```
curl -v --cookie "seid=123456789" -d '{"system": {"information": {"system_name": "SM16TAT2SA", "location": "Minnetonka", "contact": "Tech supportt"}}}'
http://192.168.1.77/api/set_sysinfo
```

```
{
  "system": {
    "information": {
      "system_name": "SM16TAT2SA",
      "location": "Minnetonka",
      "contact": "Tech supportt"
    }
  }
}
```

## 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

**cURL Commands:**

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

```
{
  "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
    }
  }, {
    "id": 2,
    "poe": {
      "pd_class": "-",
      "priority": "Low",
      "port_status": "No PD detected",
      "power_allocate": 0,
      "power_used": 0,
      "current_used": 0
    }
  }, {
    "id": 3,
    "poe": {
      "pd_class": "-",
      "priority": "Low",
      "port_status": "No PD detected",
      "power_allocate": 0,
      "power_used": 0,
      "current_used": 0
    }
  }, {
    "id": 4,
    "poe": {
      "pd_class": "-",
      "priority": "Low",
      "port_status": "No PD detected",
      "power_allocate": 0,
      "power_used": 0,
      "current_used": 0
    }
  }, {
    "id": 5,
    "poe": {
      "pd_class": "-",
      "priority": "Low",
      "port_status": "No PD detected",
      "power_allocate": 0,
      "power_used": 0,
      "current_used": 0
    }
  }, {
    "id": 6,
    "poe": {
      "pd_class": "-",

```

```
        "priority": "Low",
        "port_status": "No PD detected",
        "power_allocate": 0,
        "power_used": 0,
        "current_used": 0
    }, {
        "id": 7,
        "poe": {
            "pd_class": "-",
            "priority": "Low",
            "port_status": "No PD detected",
            "power_allocate": 0,
            "power_used": 0,
            "current_used": 0
        }
    }, {
        "id": 8,
        "poe": {
            "pd_class": "-",
            "priority": "Low",
            "port_status": "No PD detected",
            "power_allocate": 0,
            "power_used": 0,
            "current_used": 0
        }
    }
}]]
}
```

## 7. Get PoE Config

**URL:** /api/get\_poe\_config

**Method:** GET

**Request JSON:** null

**Response JSON:**

```
{
  "poe": {
    "poe_firmware_version": "208-188",
    "total_power_watts": 740,
    "power_determined_mode": "Class",
    "capacitor_detection": false
  },
  "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

**cURL Commands:**

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

```
{
  "poe": {
    "poe_firmware_version": "208-188",
    "total_power_watts": 300,
    "power_determined_mode": "Class",
    "capacitor_detection": false
  },
  "ports": [
    {
      "id": 1,
      "poe": {
        "mode": "Enabled",
        "priority": "Low",

```

```

        "power_limit_user": 30,
        "schedule": "Disabled"
    }, {
        "id": 2,
        "poe": {
            "mode": "Enabled",
            "priority": "Low",
            "power_limit_user": 30,
            "schedule": "Disabled"
        }
    }, {
        "id": 3,
        "poe": {
            "mode": "Enabled",
            "priority": "Low",
            "power_limit_user": 30,
            "schedule": "Disabled"
        }
    }, {
        "id": 4,
        "poe": {
            "mode": "Enabled",
            "priority": "Low",
            "power_limit_user": 30,
            "schedule": "Disabled"
        }
    }, {
        "id": 5,
        "poe": {
            "mode": "Enabled",
            "priority": "Low",
            "power_limit_user": 30,
            "schedule": "Disabled"
        }
    }, {
        "id": 6,
        "poe": {
            "mode": "Enabled",
            "priority": "Low",
            "power_limit_user": 30,
            "schedule": "Disabled"
        }
    }, {
        "id": 7,
        "poe": {
            "mode": "Enabled",
            "priority": "Low",
            "power_limit_user": 30,
            "schedule": "Disabled"
        }
    }, {
        "id": 8,

```

```
    "poe": {  
      "mode": "Enabled",  
      "priority": "Low",  
      "power_limit_user": 30,  
      "schedule": "Disabled"  
    }  
  }  
}
```

## 8. Set PoE Config

URL: /api/set\_poe\_config

Method: POST

Request JSON:

```
{
  "poe": {
    "power_determined_mode": "Class",
    "capacitor_detection": false
  },
  "ports": [
    {
      "id": 1,
      "poe": {
        "mode": "Enabled",
        "priority": "Low",
        "power_limit_user": 30,
        "schedule": "Disabled"
      }
    },
    ... ..
  ]
}
```

Response JSON:

```
{
  "poe": {
    "power_determined_mode": "Class",
    "capacitor_detection": false
  },
  "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
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

**cURL Commands:**

```
curl -v --cookie "seid=123456789" -d
{"\poe\":{"power_determined_mode\":"Class","\capacitor_detection\:false},\ports\":[{\id\:1
,\poe\":{"Mode\":"Enabled","\Priority\":"Low","\power_limit_user\:30,\schedule\":"Disabl
e\"}]}}" http://192.168.1.77/api/set_poe_config
```

```
{
  "poe": {
    "power_determined_mode": "Class",
    "capacitor_detection": false
  },
  "ports": [
    {
      "id": 1,
      "poe": {
        "mode": "Enabled",
        "priority": "Low",
        "power_limit_user": 30,
        "schedule": "Disabled"
      }
    },
    {
      "id": 2,
      "poe": {
        "mode": "Enabled",
        "priority": "Low",
        "power_limit_user": 30,
        "schedule": "Disabled"
      }
    },
    {
      "id": 3,
      "poe": {
        "mode": "Enabled",
        "priority": "Low",
        "power_limit_user": 30,
        "schedule": "Disabled"
      }
    },
    {
      "id": 4,
      "poe": {
        "mode": "Enabled",
        "priority": "Low",
        "power_limit_user": 30,
        "schedule": "Disabled"
      }
    }
  ]
}
```

```
    "id": 5,  
    "poe": {  
      "mode": "Enabled",  
      "priority": "Low",  
      "power_limit_user": 30,  
      "schedule": "Disabled"  
    }  
  }, {  
    "id": 6,  
    "poe": {  
      "mode": "Enabled",  
      "priority": "Low",  
      "power_limit_user": 30,  
      "schedule": "Disabled"  
    }  
  }, {  
    "id": 7,  
    "poe": {  
      "mode": "Enabled",  
      "priority": "Low",  
      "power_limit_user": 30,  
      "schedule": "Disabled"  
    }  
  }, {  
    "id": 8,  
    "poe": {  
      "mode": "Enabled",  
      "priority": "Low",  
      "power_limit_user": 30,  
      "schedule": "Disabled"  
    }  
  }  
}]  
}
```

## 9. 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": 0,
          "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
    }
}
},
... ..
]
}

```

**cURL Commands:**

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

```

{
  "ports": [
    {
      "id": 1,
      "statistics": {
        "rx_packets": {
          "all": 1368,
          "octets": 244568,
          "unicast": 714,
          "multicast": 310,
          "broadcast": 344,
          "discard": 0,
          "64 bytes": 807,
          "65-127 bytes": 274,
          "128-255 bytes": 39,
          "256-511 bytes": 10,
          "512-1023 bytes": 238,
          "1024-1518 bytes": 0,
          "1519-max bytes": 0,
          "drop": 0,
          "crc_alignment": 0,
          "oversize": 0,
          "undersize": 0,
          "fragments": 0,
          "jabber": 0
        },
        "tx_packets": {
          "all": 5364,
          "octets": 879571,
          "unicast": 648,
          "multicast": 53,
          "broadcast": 4663,
          "discard": 0,
          "64 bytes": 4457,
          "65-127 bytes": 349,
          "128-255 bytes": 83,
          "256-511 bytes": 111,
          "512-1023 bytes": 60,
          "1024-1518 bytes": 304,
          "1519-max bytes": 0,
          "drop": 0,
          "late_collision": 0,
          "excessive_collision": 0
        }
      }
    }
  ]
}

```

```

    }
  }, {
    "id": 2,
    "statistics": {
      "rx_packets": {
        "all": 0,
        "octets": 0,
        "unicast": 0,
        "multicast": 0,
        "broadcast": 0,
        "discard": 0,
        "64 bytes": 0,
        "65-127 bytes": 0,
        "128-255 bytes": 0,
        "256-511 bytes": 0,
        "512-1023 bytes": 0,
        "1024-1518 bytes": 0,
        "1519-max bytes": 0,
        "drop": 0,
        "crc_alignment": 0,
        "oversize": 0,
        "undersize": 0,
        "fragments": 0,
        "jabber": 0
      },
      "tx_packets": {
        "all": 0,
        "octets": 0,
        "unicast": 0,
        "multicast": 0,
        "broadcast": 0,
        "discard": 0,
        "64 bytes": 0,
        "65-127 bytes": 0,
        "128-255 bytes": 0,
        "256-511 bytes": 0,
        "512-1023 bytes": 0,
        "1024-1518 bytes": 0,
        "1519-max bytes": 0,
        "drop": 0,
        "late_collision": 0,
        "excessive_collision": 0
      }
    }
  }, {
    "id": 3,
    "statistics": {
      "rx_packets": {
        "all": 0,
        "octets": 0,
        "unicast": 0,
        "multicast": 0,
        "broadcast": 0,
        "discard": 0,
        "64 bytes": 0,
        "65-127 bytes": 0,
        "128-255 bytes": 0,
        "256-511 bytes": 0,

```

```

        "512-1023 bytes": 0,
        "1024-1518 bytes": 0,
        "1519-max bytes": 0,
        "drop": 0,
        "crc_alignment": 0,
        "oversize": 0,
        "undersize": 0,
        "fragments": 0,
        "jabber": 0
    },
    "tx_packets": {
        "all": 0,
        "octets": 0,
        "unicast": 0,
        "multicast": 0,
        "broadcast": 0,
        "discard": 0,
        "64 bytes": 0,
        "65-127 bytes": 0,
        "128-255 bytes": 0,
        "256-511 bytes": 0,
        "512-1023 bytes": 0,
        "1024-1518 bytes": 0,
        "1519-max bytes": 0,
        "drop": 0,
        "late_collision": 0,
        "excessive_collision": 0
    }
}, {
    "id": 4,
    "statistics": {
        "rx_packets": {
            "all": 0,
            "octets": 0,
            "unicast": 0,
            "multicast": 0,
            "broadcast": 0,
            "discard": 0,
            "64 bytes": 0,
            "65-127 bytes": 0,
            "128-255 bytes": 0,
            "256-511 bytes": 0,
            "512-1023 bytes": 0,
            "1024-1518 bytes": 0,
            "1519-max bytes": 0,
            "drop": 0,
            "crc_alignment": 0,
            "oversize": 0,
            "undersize": 0,
            "fragments": 0,
            "jabber": 0
        },
        "tx_packets": {
            "all": 0,
            "octets": 0,
            "unicast": 0,
            "multicast": 0,
            "broadcast": 0,

```

```

        "discard": 0,
        "64 bytes": 0,
        "65-127 bytes": 0,
        "128-255 bytes": 0,
        "256-511 bytes": 0,
        "512-1023 bytes": 0,
        "1024-1518 bytes": 0,
        "1519-max bytes": 0,
        "drop": 0,
        "late_collision": 0,
        "excessive_collision": 0
    }
}
}, {
    "id": 5,
    "statistics": {
        "rx_packets": {
            "all": 3800,
            "octets": 265506,
            "unicast": 85,
            "multicast": 35,
            "broadcast": 3680,
            "discard": 0,
            "64 bytes": 3511,
            "65-127 bytes": 184,
            "128-255 bytes": 89,
            "256-511 bytes": 0,
            "512-1023 bytes": 16,
            "1024-1518 bytes": 0,
            "1519-max bytes": 0,
            "drop": 0,
            "crc_alignment": 0,
            "oversize": 0,
            "undersize": 0,
            "fragments": 0,
            "jabber": 0
        },
        "tx_packets": {
            "all": 1981,
            "octets": 209741,
            "unicast": 325,
            "multicast": 328,
            "broadcast": 1328,
            "discard": 0,
            "64 bytes": 1432,
            "65-127 bytes": 378,
            "128-255 bytes": 89,
            "256-511 bytes": 0,
            "512-1023 bytes": 77,
            "1024-1518 bytes": 5,
            "1519-max bytes": 0,
            "drop": 0,
            "late_collision": 0,
            "excessive_collision": 0
        }
    }
}, {
    "id": 6,
    "statistics": {

```

```

        "rx_packets": {
            "all": 0,
            "octets": 0,
            "unicast": 0,
            "multicast": 0,
            "broadcast": 0,
            "discard": 0,
            "64 bytes": 0,
            "65-127 bytes": 0,
            "128-255 bytes": 0,
            "256-511 bytes": 0,
            "512-1023 bytes": 0,
            "1024-1518 bytes": 0,
            "1519-max bytes": 0,
            "drop": 0,
            "crc_alignment": 0,
            "oversize": 0,
            "undersize": 0,
            "fragments": 0,
            "jabber": 0
        },
        "tx_packets": {
            "all": 0,
            "octets": 0,
            "unicast": 0,
            "multicast": 0,
            "broadcast": 0,
            "discard": 0,
            "64 bytes": 0,
            "65-127 bytes": 0,
            "128-255 bytes": 0,
            "256-511 bytes": 0,
            "512-1023 bytes": 0,
            "1024-1518 bytes": 0,
            "1519-max bytes": 0,
            "drop": 0,
            "late_collision": 0,
            "excessive_collision": 0
        }
    }, {
        "id": 7,
        "statistics": {
            "rx_packets": {
                "all": 0,
                "octets": 0,
                "unicast": 0,
                "multicast": 0,
                "broadcast": 0,
                "discard": 0,
                "64 bytes": 0,
                "65-127 bytes": 0,
                "128-255 bytes": 0,
                "256-511 bytes": 0,
                "512-1023 bytes": 0,
                "1024-1518 bytes": 0,
                "1519-max bytes": 0,
                "drop": 0,
                "crc_alignment": 0,

```

```

        "oversize": 0,
        "undersize": 0,
        "fragments": 0,
        "jabber": 0
    },
    "tx_packets": {
        "all": 0,
        "octets": 0,
        "unicast": 0,
        "multicast": 0,
        "broadcast": 0,
        "discard": 0,
        "64 bytes": 0,
        "65-127 bytes": 0,
        "128-255 bytes": 0,
        "256-511 bytes": 0,
        "512-1023 bytes": 0,
        "1024-1518 bytes": 0,
        "1519-max bytes": 0,
        "drop": 0,
        "late_collision": 0,
        "excessive_collision": 0
    }
}
}, {
    "id": 8,
    "statistics": {
        "rx_packets": {
            "all": 0,
            "octets": 0,
            "unicast": 0,
            "multicast": 0,
            "broadcast": 0,
            "discard": 0,
            "64 bytes": 0,
            "65-127 bytes": 0,
            "128-255 bytes": 0,
            "256-511 bytes": 0,
            "512-1023 bytes": 0,
            "1024-1518 bytes": 0,
            "1519-max bytes": 0,
            "drop": 0,
            "crc_alignment": 0,
            "oversize": 0,
            "undersize": 0,
            "fragments": 0,
            "jabber": 0
        },
        "tx_packets": {
            "all": 0,
            "octets": 0,
            "unicast": 0,
            "multicast": 0,
            "broadcast": 0,
            "discard": 0,
            "64 bytes": 0,
            "65-127 bytes": 0,
            "128-255 bytes": 0,
            "256-511 bytes": 0,

```

```

        "512-1023 bytes":    0,
        "1024-1518 bytes":  0,
        "1519-max bytes":   0,
        "drop": 0,
        "late_collision":    0,
        "excessive_collision": 0
    }
}
}, {
    "id": 9,
    "statistics": {
        "rx_packets": {
            "all": 0,
            "octets": 0,
            "unicast": 0,
            "multicast": 0,
            "broadcast": 0,
            "discard": 0,
            "64 bytes": 0,
            "65-127 bytes": 0,
            "128-255 bytes": 0,
            "256-511 bytes": 0,
            "512-1023 bytes": 0,
            "1024-1518 bytes": 0,
            "1519-max bytes": 0,
            "drop": 0,
            "crc_alignment": 0,
            "oversize": 0,
            "undersize": 0,
            "fragments": 0,
            "jabber": 0
        },
        "tx_packets": {
            "all": 0,
            "octets": 0,
            "unicast": 0,
            "multicast": 0,
            "broadcast": 0,
            "discard": 0,
            "64 bytes": 0,
            "65-127 bytes": 0,
            "128-255 bytes": 0,
            "256-511 bytes": 0,
            "512-1023 bytes": 0,
            "1024-1518 bytes": 0,
            "1519-max bytes": 0,
            "drop": 0,
            "late_collision": 0,
            "excessive_collision": 0
        }
    }
}, {
    "id": 10,
    "statistics": {
        "rx_packets": {
            "all": 0,
            "octets": 0,
            "unicast": 0,
            "multicast": 0,

```

```
        "broadcast": 0,
        "discard": 0,
        "64 bytes": 0,
        "65-127 bytes": 0,
        "128-255 bytes": 0,
        "256-511 bytes": 0,
        "512-1023 bytes": 0,
        "1024-1518 bytes": 0,
        "1519-max bytes": 0,
        "drop": 0,
        "crc_alignment": 0,
        "oversize": 0,
        "undersize": 0,
        "fragments": 0,
        "jabber": 0
    },
    "tx_packets": {
        "all": 0,
        "octets": 0,
        "unicast": 0,
        "multicast": 0,
        "broadcast": 0,
        "discard": 0,
        "64 bytes": 0,
        "65-127 bytes": 0,
        "128-255 bytes": 0,
        "256-511 bytes": 0,
        "512-1023 bytes": 0,
        "1024-1518 bytes": 0,
        "1519-max bytes": 0,
        "drop": 0,
        "late_collision": 0,
        "excessive_collision": 0
    }
}
}]
}* Connection #0 to host 192.168.1.77 left intact
```

## 10. 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,
      "description": ""
    },
    ... ..
  ]
}
```

**cURL Commands:**

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

```
{
  "ports": [
    {
      "id": 1,
      "link": "1Gfdx",
      "media": "copper",
      "speed_mode": "Auto",
      "flow_control": false,
      "description": ""
    },
    {
      "id": 2,
      "link": "down",
      "media": "copper",
      "speed_mode": "Auto",
      "flow_control": false,
      "description": ""
    },
    {
      "id": 3,
      "link": "down",
      "media": "copper",
      "speed_mode": "Auto",
      "flow_control": false,
      "description": ""
    },
    {
      "id": 4,
      "link": "down",
      "media": "copper",

```

```
    "speed_mode": "Auto",
    "flow_control": false,
    "description": ""
  }, {
    "id": 5,
    "link": "1Gfdx",
    "media": "copper",
    "speed_mode": "Auto",
    "flow_control": false,
    "description": ""
  }, {
    "id": 6,
    "link": "down",
    "media": "copper",
    "speed_mode": "Auto",
    "flow_control": false,
    "description": ""
  }, {
    "id": 7,
    "link": "down",
    "media": "copper",
    "speed_mode": "Auto",
    "flow_control": false,
    "description": ""
  }, {
    "id": 8,
    "link": "down",
    "media": "copper",
    "speed_mode": "Auto",
    "flow_control": false,
    "description": ""
  }, {
    "id": 9,
    "link": "down",
    "media": "fiber",
    "speed_mode": "Auto",
    "flow_control": false,
    "description": ""
  }, {
    "id": 10,
    "link": "down",
    "media": "fiber",
    "speed_mode": "Auto",
    "flow_control": false,
    "description": ""
  }
}
```

## 11. Set Port Config

URL: /api/set\_port\_config

Method: POST

Request JSON:

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

Response JSON:

```
{
  "ports": [
    {
      "id": 1,
      "link": "down",
      "media": "copper",
      "speed_mode": "Auto",
      "flow_control": false,
      "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"	Auto
flow_control	Boolean		false
description	String	0-63 alphanumeric	

**cURL Commands:**

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

```
{
  "ports": [
    {
      "id": 1,
      "link": "1Gfdx",
      "media": "copper",
      "speed_mode": "Auto",
      "flow_control": false,
      "description": "test"
    },
    {
      "id": 2,
      "link": "down",
      "media": "copper",
      "speed_mode": "Auto",
      "flow_control": false,
      "description": ""
    },
    {
      "id": 3,
      "link": "down",
      "media": "copper",
      "speed_mode": "Auto",
      "flow_control": false,
      "description": ""
    },
    {
      "id": 4,
      "link": "down",
      "media": "copper",
      "speed_mode": "Auto",
      "flow_control": false,
      "description": ""
    },
    {
      "id": 5,
      "link": "1Gfdx",
      "media": "copper",
      "speed_mode": "Auto",
      "flow_control": false,
      "description": ""
    },
    {
      "id": 6,
      "link": "down",
      "media": "copper",
      "speed_mode": "Auto",
      "flow_control": false,
      "description": ""
    },
    {
      "id": 7,
      "link": "down",
      "media": "copper",
      "speed_mode": "Auto",

```

```
    "flow_control": false,  
    "description": ""  
  }, {  
    "id": 8,  
    "link": "down",  
    "media": "copper",  
    "speed_mode": "Auto",  
    "flow_control": false,  
    "description": ""  
  }, {  
    "id": 9,  
    "link": "down",  
    "media": "fiber",  
    "speed_mode": "Auto",  
    "flow_control": false,  
    "description": ""  
  }, {  
    "id": 10,  
    "link": "down",  
    "media": "fiber",  
    "speed_mode": "Auto",  
    "flow_control": false,  
    "description": ""  
  }  
}]  
}
```

## 12. Firmware Upgrade

**URL:** /api/firmware\_upgrade

**Method:** POST

**Request JSON:**

```
{
  "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>	

**cURL Commands:**

```
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

* Trying 192.168.1.77:80...
* Connected to 192.168.1.77 (192.168.1.77) port 80 (#0)
> POST /api/firmware_upgrade HTTP/1.1
> Host: 192.168.1.77
> User-Agent: curl/7.71.1
> Accept: */*
> Cookie: seid=123456789
> Content-Length: 107
> Content-Type: application/x-www-form-urlencoded
>
* upload completely sent off: 107 out of 107 bytes
* Mark bundle as not supporting multiuse
< HTTP/1.1 200 OK
< Access-Control-Allow-Origin: *
< Content-type: application/json; charset=utf-8
< Content-Length: 0
< Date: Sun, 12 Jul 2020 17:43:23 GMT
< Server: lighttpd/1.4.42-devel-1476
<
* Connection #0 to host 192.168.1.77 left intact
```

## 13. Get Firmware Upgrade Status

**URL:** /api/get\_firmware\_upgrade\_status

**Method:** GET

**Request JSON:** null

**Response JSON:**

```
{
  "system": {
    "firmware": {
      "upgrade_status": "Error : The firmware is already update."
    }
  }
}
```

**cURL Commands:**

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

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

## 14. Get Account Configuration

**URL:** /api/get\_account\_config

**Method:** GET

**Request JSON:** null

**Response JSON:**

```
{
  "account": [{
    "username": "admin",
    "privilege_level": 15
  },
  ... ..
]
```

**cURL Commands:**

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

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

## 15. 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: 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

**cURL Commands:**

```
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
```

```
{
  "account": [
    {
      "username": "admin",
      "privilege_level": 15
    }, {
      "username": "superuser",
      "privilege_level": 15
    }
  ]
}* Connection #0 to host 192.168.1.77 left intact
```

## 16. 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
  },
  ... ..
  ]
}
```

**cURL Commands:**

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

```
{
  "mac_table": [
    {
      "type": "Dynamic",
      "mac": "00-40-C8-77-55-33",
      "vid": 1,
      "port": 1
    },
    {
      "type": "Dynamic",
      "mac": "00-E0-4C-68-01-81",
      "vid": 1,
      "port": 1
    },
    {
      "type": "Dynamic",
      "mac": "00-40-C7-16-10-33",
      "vid": 1,
      "port": 5
    }
  ]
}
```

## 17. Save Configuration

**URL:** /api/save\_configuration

**Method:** GET

**Request JSON:** null

**Response JSON:**

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

**cURL Commands:**

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

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

## 18. 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": false,
        "offset": 60,
        "start_time": {
          "month": "Jan",
          "week": 1,
          "day": "Mon",
          "hour": 1
        },
        "end_time": {
          "month": "Jan",
          "week": 1,
          "day": "Mon",
          "hour": 1
        }
      }
    }
  }
}
```

**cURL Commands:**

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

```
{
  "system": {
    "time": {
      "clock_source": "Local Setting",
      "system_date": "2017-01-01 00:09:45",
      "time_zone": "0",
      "acronym": "",
      "daylight": {
        "mode": false,
        "offset": 60,
        "start_time": {
```

```
        "month": "Jan",
        "week": 1,
        "day": "Mon",
        "hour": 0
    },
    "end_time": {
        "month": "Jan",
        "week": 1,
        "day": "Mon",
        "hour": 0
    }
}
}
}
}* Connection #0 to host 192.168.1.77 left intact
```

## 19. 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": false,
        "offset": 60,
        "start_time": {
          "month": "Jan",
          "week": 1,
          "day": "Mon",
          "hour": 1
        },
        "end_time": {
          "month": "Jan",
          "week": 1,
          "day": "Mon",
          "hour": 1
        }
      }
    }
  }
}
```

Response JSON:

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



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)

**cURL Commands:**

```
curl -v --cookie "seid=123456789" -d '{"system": {"time": {"clock_source": "Local Setting", "system_date": "2020-07-013 01:01:30", "time_zone": "5400", "acronym": "", "daylight": {"mode": false, "offset": 60, "start_time": {"month": "Jan", "week": 1, "day": "Mon", "hour": 1}, "end_time": {"month": "Jan", "week": 1, "day": "Mon", "hour": 1}}}}}' http://192.168.1.77/api/set_system_time
```

```
{
  "system": {
    "time": {
      "clock_source": "Local Setting",
      "system_date": "2020-07-13 10:01:30",
      "time_zone": 5400,
      "acronym": "",
      "daylight": {
        "mode": false,
        "offset": 60,
        "start_time": {
          "month": "Jan",
          "week": 1,
          "day": "Mon",
          "hour": 1
        },
        "end_time": {
          "month": "Jan",
          "week": 1,
          "day": "Mon",
          "hour": 1
        }
      }
    }
  }
}
```

}

## 20. Get NTP Server

**URL:** /api/get\_ntp\_server

**Method:** GET

**Request JSON:** null

**Response JSON:**

```
{
  "system": {
    "ntp": {
      "server": [
        {"id": 1, "host": "192.168.1.1"},
        ... ..
      ],
      "interval": 60
    }
  }
}
```

**cURL Commands:**

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

```
{
  "system": {
    "ntp": {
      "server": [
        {
          "id": 1,
          "host": ""
        }, {
          "id": 2,
          "host": ""
        }, {
          "id": 3,
          "host": ""
        }, {
          "id": 4,
          "host": ""
        }, {
          "id": 5,
          "host": ""
        }, {
          "id": 6,
          "host": ""
        }
      ],
      "interval": 60
    }
  }
}
```

## 21. Set NTP Server

**URL:** /api/set\_ntp\_server

**Method:** POST

**Request JSON:**

```
{
  "system": {
    "ntp": {
      "server": [
        {"id": 1, "host": "192.168.1.1"},
        ... ..
      ],
      "interval": 60
    }
  }
}
```

**Response JSON:**

```
{
  "system": {
    "ntp": {
      "server": [
        {"id": 1, "host": "192.168.1.1"},
        ... ..
      ],
      "interval": 60
    }
  }
}
```

**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

**cURL Commands:**

```
curl -v --cookie "seid=123456789" -d '{"system": {"ntp": {"server": [{"id": 1, "host": "192.168.1.1"}], "interval": 60}}'
http://192.168.1.77/api/set_ntp_server
```

```
{
  "system": {
    "ntp": {
      "server": [
        {
          "id": 1,
          "host": "192.168.1.1"
        }
      ]
    }
  }
}
```

```
    }, {
      "id": 2,
      "host": ""
    }, {
      "id": 3,
      "host": ""
    }, {
      "id": 4,
      "host": ""
    }, {
      "id": 5,
      "host": ""
    }, {
      "id": 6,
      "host": ""
    }
  ],
  "interval": 60
}
}
}* Connection #0 to host 192.168.1.77 left intact
```

## 22. Get Syslog Server

**URL:** /api/get\_syslog\_server

**Method:** GET

**Request JSON:** null

**Response JSON:**

```
{
  "event_notification":{
    "syslog":{
      "mode": false,
      "server":[
        {"id": 1,"address":"192.168.1.1"},
        ... ..
      ]
    }
  }
}
```

**cURL Commands:**

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

```
{
  "event_notification": {
    "syslog": {
      "mode": false,
      "server": [
        [{"id": 1,
          "address": ""
        }, {
          "id": 2,
          "address": ""
        }, {
          "id": 3,
          "address": ""
        }, {
          "id": 4,
          "address": ""
        }, {
          "id": 5,
          "address": ""
        }, {
          "id": 6,
          "address": ""
        }
      ]
    }
  }
}
```

## 23. Set Syslog Server

**URL:** /api/set\_syslog\_server

**Method:** POST

**Request JSON:**

```
{
  "event_notification":{
    "syslog":{
      "mode": false,
      "server":[
        {"id": 1,"address":"192.168.1.1"},
        ... ..
      ]
    }
  }
}
```

**Response JSON:**

```
{
  "event_notification":{
    "syslog":{
      "mode": false,
      "server":[
        {"id": 1,"address":"192.168.1.1"},
        ... ..
      ]
    }
  }
}
```

**Section:**

Name	Data type	Allowed / Value	Default Value
mode	Boolean		false
id	Integer	1-6	
address	String	<IPv4 address>	

**cURL Commands:**

```
curl -v --cookie "seid=123456789" -d
"{\"event_notification\":{\"syslog\":{\"mode\":false,\"server\":[\"id\":1,\"address\":\"192.168.1.1\"]}}}" http://192.168.1.77/api/set_syslog_server
```

```
{
  "event_notification": {
    "syslog": {
      "mode": false,
      "server": [
        {
          "id": 1,
          "address": "192.168.1.1"
        }
      ]
    }
  }
}
```

```
    }, {
      "id": 2,
      "address": ""
    }, {
      "id": 3,
      "address": ""
    }, {
      "id": 4,
      "address": ""
    }, {
      "id": 5,
      "address": ""
    }, {
      "id": 6,
      "address": ""
    }
  ]
}
}
```

## 24. 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"
      }
    }
  ]
}
```

**cURL Commands:**

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

```
{
  "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"
      }
    }, {
      "id": 2,
      "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"
        }
      }
    }, {
      "id": 3,
      "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"
    }
}, {
    "id": 4,
    "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"
        }
    }
}, {
    "id": 5,
    "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"
        }
    }
}, {
    "id": 6,
    "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"
    }
  }, {
    "id": 7,
    "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"
      }
    }
  }, {
    "id": 8,
    "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"
      }
    }
  }, {
    "id": 9,
    "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"
    }
}
}, {
    "id": 10,
    "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"
        }
    }
}
}]
}

```

## 25. 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
      }
    }
  }, {
    "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"
      }
    }
  }
],
  ... ..
}
```

**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"
      }
    }
  }
  ...
]
```

**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	

Name	Data type	Allowed / Value	Default Value
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

**cURL Commands:**

```
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
```

```
{
  "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"
        }
      }
    }, {
      "id": 2,
      "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"
    }
}, {
    "id": 3,
    "vlan": {
        "mode": "Trunk",
        "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"
        }
    }
}, {
    "id": 4,
    "vlan": {
        "mode": "Hybrid",
        "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"
        }
    }
}, {
    "id": 5,
    "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"
        }
    }, {
        "id": 6,
        "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"
            }
        }
    }, {
        "id": 7,
        "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"
            }
        }
    }

```

```

        "allowed_vlan": "1"
    }
}, {
    "id": 8,
    "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"
        }
    }
}, {
    "id": 9,
    "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"
        }
    }
}, {
    "id": 10,
    "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"
    }
}]]
}
```

## 26. 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
    }
    ... ..
  ]
}
```

**cURL Commands:**

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

```
{
  "vlan": {
    "mac_based_vlan": []
  }
}
```

## 27. 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,
          "dhcp_addr": "",
          "static_addr": "192.168.1.77",
          "static_mask": 24
        },
        "ipv6": {
          "static_addr": "",
          "static_mask": 0
        }
      }
      ... ..
    ]
  }
}
```

**cURL Commands:**

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

```
{
  "system": {
    "ip": {
      "interfaces": [{
        "vid": 1,
        "ipv4": {
          "dhcp": false,
          "fallback": 0,
          "dhcp_addr": "",
          "static_addr": "192.168.1.77",
          "static_mask": 24
        },
        "ipv6": {
          "static_addr": "",
          "static_mask": 0
        }
      }
    ]
  }
}
```

```
}  
  }  
}
```

## 28. Set IP Address

URL: /api/set\_ip\_address

Method: POST

Request JSON:

```
{
  "system": {
    "ip": {
      "interfaces": [{
        "vid": 1,
        "ipv4": {
          "dhcp": false,
          "fallback": 0,
          "dhcp_addr": "",
          "static_addr": "192.168.1.77",
          "static_mask": 24
        },
        "ipv6": {
          "static_addr": "",
          "static_mask": 0
        }
      }
      ... ..
    ]
  }
}
```

Response JSON:

```
{
  "system": {
    "ip": {
      "interfaces": [{
        "vid": 1,
        "ipv4": {
          "dhcp": false,
          "fallback": 0,
          "dhcp_addr": "",
          "static_addr": "192.168.1.77",
          "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	

**cURL Commands:**

```

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

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

```

## 29. Get Mirror Config

**URL:** /api/get\_mirror\_config

**Method:** GET

**Request JSON:** null

**Response JSON:**

```
{
  "system": {
    "mirror": [{
      "session": 1,
      "enable": false,
      "destination_port": 2,
      "source_tx": "4,6-8",
      "source_rx": "3,5,7-8"
    }]
  }
}
```

**Note:** This configuration is based on the SMxTAT2SA switch chip function.

**cURL Commands:**

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

```
{
  "system": {
    "mirror": [
      {
        "session": 1,
        "enable": false,
        "destination_port": 1,
        "source_tx": "",
        "source_rx": ""
      }
    ]
  }
}
```

## 30. Set Mirror Config

URL: /api/set\_mirror\_config

Method: POST

Request JSON:

```
{
  "system": {
    "mirror": [{
      "session": 1,
      "enable": false,
      "destination_port": 2,
      "source_tx": "4,6-8",
      "source_rx": "3,5,7-8"
    }]
  }
}
```

Response JSON:

```
{
  "system": {
    "mirror": [{
      "session": 1,
      "enable": false,
      "destination_port": 2,
      "source_tx": "4,6-8",
      "source_rx": "3,5,7-8"
    }]
  }
}
```

**Section: Note:** This configuration is based on the SMxTAT2SA switch chip function.

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>	

## 31. 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: Note:** This configuration is based on the SMxTAT2SA switch chip function.

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

**cURL Commands:**

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

```
{
  "ports": [
    {
      "id": 5,
      "cable_diagnostic": {
        "link": "1G",
        "result": "OK",
        "length": "6.00 (m)"
      }
    }
  ]
}
}* Connection #0 to host 192.168.1.77 left intact
```

## 32. Get ACL Config

**URL:** /api/get\_acl\_config

**Method:** GET

**Request JSON:** null

**Response JSON:** **Note:** This configuration is based on the SMxTAT2SA switch chip function.

```
{
  "acl": [{
    "ace_id": 1,
    "ingress_port_list": "1",
    "frame_type": "Any",
    "action": "Deny",
    "mirror": true,
    "counter": true,
    "metering": {
      "enable": true,
      "bandwidth": 900000
    }
  }], {
    "ace_id": 2,
    "ingress_port_list": "2",
    "frame_type": "Ethernet Type",
    "action": "Shutdown",
    "mirror": false,
    "counter": false,
    "metering": {
      "enable": false,
      "bandwidth": 1000000
    }
  },
  "ethernet_type": {
    "mac": {
      "smac_filter": "Specific",
      "smac_value": "00-00-00-00-00-01",
      "dmac_filter": "Specific",
      "dmac_value": "00-00-00-00-00-02"
    },
    "ether_type": {
      "filter": "Specific",
      "value": "aaaa"
    }
  },
  "vlan": {
    "ctag": {
      "tagged": "Enabled",
      "vid_filter": "Specific",
      "vid": 101,

```

```

        "priority": "4-7"
      },
      "stag": {
        "tagged": "Enabled",
        "vid_filter": "Specific",
        "vid": 102,
        "priority": "4-7"
      }
    }
  }
},{
  "ace_id": 3,
  "ingress_port_list": "Any",
  "frame_type": "IPv4",
  "action": "Permit",
  "mirror": false,
  "counter": false,
  "metering": {
    "enable": false,
    "bandwidth": 1000000
  },
  "ipv4": {
    "protocol_filter": "TCP",
    "protocol_value": 6,
    "fragment": "No",
    "tos_filter": "Any",
    "tos_dscp_value": "",
    "tos_ip_value": "",
    "sip_filter": "Any",
    "sip_value": "0.0.0.0",
    "sip_mask": 0,
    "dip_filter": "Any",
    "dip_value": "0.0.0.0",
    "dip_mask": 0,
    "icmp": {
      "type_filter": "Any",
      "type_value": 255,
      "code_filter": "Any",
      "code_value": 255
    },
    "udp": {
      "sport_filter": "Any",
      "sport_low": 0,
      "sport_high": 65535,
      "dport_filter": "Any",
      "dport_low": 0,

```

```

        "dport_high": 65535
    },
    "tcp": {
        "sport_filter": "Any",
        "sport_low": 0,
        "sport_high": 65535,
        "dport_filter": "Any",
        "dport_low": 0,
        "dport_high": 65535,
        "tcp_fin": "Any",
        "tcp_syn": "Any",
        "tcp_rst": "Any",
        "tcp_psh": "Any",
        "tcp_ack": "Any",
        "tcp_urg": "Any"
    }
}
... ..
]
}

```

**cURL Commands:**

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

```

{
  "acl": [{
    "ace_id": 1,
    "ingress_port_list": "Any",
    "frame_type": "Any",
    "action": "Permit",
    "mirror": false,
    "counter": false,
    "metering": {
      "enable": false,
      "bandwidth": 1000000
    }
  }]
}

```

### 33. Set ACL Config

URL: /api/set\_acl\_config

Method: POST

Request JSON:

```
{
  "acl": [{
    "ace_id": 1,
    "ingress_port_list": "1",
    "frame_type": "Any",
    "action": "Deny",
    "mirror": true,
    "counter": true,
    "metering": {
      "enable": true,
      "bandwidth": 900000
    }
  }, {
    "ace_id": 2,
    "ingress_port_list": "2",
    "frame_type": "Ethernet Type",
    "action": "Shutdown",
    "mirror": false,
    "counter": false,
    "metering": {
      "enable": false,
      "bandwidth": 1000000
    }
  },
  "ethernet_type": {
    "mac": {
      "smac_filter": "Specific",
      "smac_value": "00-00-00-00-00-01",
      "dmac_filter": "Specific",
      "dmac_value": "00-00-00-00-00-02"
    },
    "ether_type": {
      "filter": "Specific",
      "value": "aaaa"
    }
  },
  "vlan": {
    "ctag": {
      "tagged": "Enabled",
      "vid_filter": "Specific",
      "vid": 101,
      "priority": "4-7"
    }
  }
}
```



```

    },
    "tcp": {
        "sport_filter": "Any",
        "sport_low": 0,
        "sport_high": 65535,
        "dport_filter": "Any",
        "dport_low": 0,
        "dport_high": 65535,
        "tcp_fin": "Any",
        "tcp_syn": "Any",
        "tcp_rst": "Any",
        "tcp_psh": "Any",
        "tcp_ack": "Any",
        "tcp_urg": "Any"
    }
}
... ..
]
}

```

**Response JSON:**

```

{
  "acl": [{
    "ace_id": 1,
    "ingress_port_list": "1",
    "frame_type": "Any",
    "action": "Deny",
    "mirror": true,
    "counter": true,
    "metering": {
      "enable": true,
      "bandwidth": 900000
    }
  }
  ... ..
  ]
}

```

**Section:**

Name	Data type	Allowed / Value	Default Value
ace_id	Integer	1-256	
next_ace_id	Integer	0-256	0
ingress_port_list	String	"Any"、<port number>	Any
frame_type	String	"Any"、"Ethernet Type"、"IPv4"	Any
action	String	"Deny"、"Permit"、"Shutdown"	Permit

Name	Data type	Allowed / Value	Default Value
mirror	Boolean	false	
counter	Boolean	false	
metering : enable	Boolean	false	
metering : bandwidth	Integer	16-1000000	1000000
mac : smac_filter	String	"Any"、"Specific"	Any
mac : smac_value	String	<mac address>	
mac : smac_filter	String	"Any"、"Specific"、"MC"、"BC"、"UC"	Any
mac : smac_value	String	<mac address>	
ether_type : filter	String	"Any"、"Specific"	Any
ether_type : value	String	0000-FFFF	FFFF
tagged	String	"Any"、"Disabled"、"Enabled"	Any
vid_filter	String	"Any"、"Specific"	Any
vid	Integer	1-4095	
priority	String	"0"、"1"、"2"、"3"、 "4"、"5"、"6"、"7"、"0-1"、"2-3"、"4-5"、"6-7"、 "0-3"、"4-7"、"Any"	Any
protocol_filter	String	"Any"、"ICMP"、"UDP"、"TCP"、"Other"	Any
protocol_value	Integer	0-255	
fragment	String	"Any"、"Yes"、"No"	Any
tos_filter	String	"Any"、"DSCP"、"IP Precedence"	Any
tos_dscp_value	String	"0(BE)"、"1"、"2"、"3"、"4"、"5"、"6"、"7"、 "8(CS1)"、"9"、"10(AF11)"、"11"、"12(AF12)"、"13"、 "14(AF13)"、"15"、"16(CS2)"、"17"、"18(AF21)"、 "19"、"20(AF22)"、"21"、"22(AF23)"、"23"、 "24(CS3)"、"25"、"26(AF31)"、"27"、"28(AF32)"、 "29"、"30(AF33)"、"31"、"32(CS4)"、"33"、 "34(AF41)"、"35"、"36(AF42)"、"37"、"38(AF43)"、 "39"、"40(CS5)"、"41"、"42"、"43"、"44"、"45"、 "46(EF)"、"47"、 "48(CS6)"、"49"、"50"、"51"、"52"、"53"、"54"、 "55"、"56(CS7)"、"57"、"58"、"59"、"60"、"61"、 "62"、"63"	
tos_ip_value	String	"0"、"1"、"2"、"3"、"4"、"5"、 "6"、"7"、"0-1"、"2-3"、"4-5"、 "6-7"、"0-3"、"4-7"	
sip_filter	String	"Any"、"Host"、"Network"	Any
sip_value	String	<ip address>	
sip_mask	Integer	1-32	
dip_filter	String	"Any"、"Host"、"Network"	Any
dip_value	String	<ip address>	

Name	Data type	Allowed / Value	Default Value
dip_mask	Integer	1-32	
icmp : type_filter	String	"Any"、"Specific"	Any
icmp : type_value	Integer	0-255	
icmp : code_filter	String	"Any"、"Specific"	Any
icmp : code_value	Integer	0-255	
sport_filter	String	"Any"、"Specific"、"Range"	Any
sport_low	Integer	0-65535	
sport_high	Integer	0-65535	
dport_filter	String	"Any"、"Specific"、"Range"	Any
dport_low	Integer	0-65535	
dport_high	Integer	0-65535	
tcp_fin	String	"0"、"1"、"Any"	Any
tcp_syn	String	"0"、"1"、"Any"	Any
tcp_rst	String	"0"、"1"、"Any"	Any
tcp_psh	String	"0"、"1"、"Any"	Any
tcp_ack	String	"0"、"1"、"Any"	Any
tcp_urg	String	"0"、"1"、"Any"	Any

**Note 1:** Only modify one at a time.

**Note 2:** This configuration is based on the SMxTAT2SA switch chip function.

**Note 3:** The ACL entry set at the end of the table when "next\_ace\_id" value is 0.

#### cURL Commands:

```
curl -v --cookie "seid=123456789" -d "{\"acl\": {\"ace_id\": 3, \"next_ace_id\": 1, \"ingress_port_list\": \"1\", \"frame_type\": \"Any\", \"action\": \"Deny\", \"mirror\": true, \"counter\": true, \"metering\": {\"enable\": true, \"bandwidth\": 900000}}}" http://192.168.1.77/api/set_acl_config
```

```
{
  "acl": [{
    "ace_id": 3,
    "ingress_port_list": "1",
    "frame_type": "Any",
    "action": "Deny",
    "mirror": true,
    "counter": true,
    "metering": {
      "enable": true,
      "bandwidth": 900000
    }
  }, {
    "ace_id": 1,
    "ingress_port_list": "Any",
    "frame_type": "Any",
    "action": "Permit",
    "mirror": false,
    "counter": false,
    "metering": {
```

```
}  
  }]  
    }  
      "enable":    false,  
      "bandwidth": 1000000
```

## 34. Set SSL Key

**URL:** /api/create\_ssl\_key

**Method:** POST

**Request JSON:**

```
{
  "ssl_key": {
    "create":{
      "country":"GB",
      "state":"Test State",
      "location":"Test Locality",
      "organization":"Organization Name",
      "organizational_unit":"Organizational Unit Name",
      "common_name":"Common Name",
      "email":"test@example.com",
      "days":3650,
      "key_length":2048
    }
  }
}
```

**Response JSON:**

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

**Section:**

Name	Data type	Allowed / Value	Default Value
country	String	0-2 alphanumeric	
state	String	0-128 alphanumeric	
location	String	0-128 alphanumeric	
organization	String	0-64 alphanumeric	
organizational_unit	String	0-64 alphanumeric	
common_name	String	0-64 alphanumeric	
email	String	0-64 alphanumeric	
days	Integer	1-3650 days	3650
key_length	Integer	2048 bits	2048

**cURL Commands:**

```
curl -v --cookie "seid=123456789" -d "{\"ssl_key\":
{ \"create\":{ \"country\": \"US\", \"state\": \"MN\", \"location\": \"Minnetonka\", \"organization\": \"Tr
ansition
Networks\", \"organizational_unit\": \"IES\", \"common_name\": \"IES\", \"email\": \"techsupport@transit
ion.com\", \"days\": 3650, \"key_length\": 2048}}}" http://192.168.1.77/api/create_ssl_key
```

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

## 35. Get SSL Key Status

**URL:** /api/get\_ssl\_key\_status

**Method:** GET

**Request JSON:** null

**Response JSON:**

```
{
  "ssl_key": {
    "status": "ready in used"
  }
}
```

**cURL Commands:**

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

```
{
  "ssl_key": {
    "status": "Ready in used"
  }
}
```

## 36. 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",
      "switch_addr" : "192.168.90.3",
      "device_name" : "Switch A",
      "device_list" :
      [
        {
          "port_no" : 6,
          "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,
          "link_partner_port_no": 1,
          "number_of_alarm_events": 2,
          "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"
            }
          ]
        },
        {
          "port_no" : 10,
          "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,
        "link_partner_port_no": 2,
        "number_of_alarm_events": 0,
        "events":[]
    },
    {
        "port_no" : 26,
        "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,
        "link_partner_port_no": 0,
        "number_of_alarm_events": 0,
        "events":[]
    }
}

```

**Section:**

Name	Data type	Unit
poe_used	Integer	0.1 watt
rx_rate	Integer	byte

**cURL Commands:**

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

```

* Trying 192.168.1.77:80...
* Connected to 192.168.1.77 (192.168.1.77) port 80 (#0)
> GET /api/dev_list_table HTTP/1.1
> Host: 192.168.1.77
> User-Agent: curl/7.71.1
> Accept: */*
> Cookie: seid=123456789
>
* Mark bundle as not supporting multiuse
< HTTP/1.1 200 OK
< Access-Control-Allow-Origin: *
< Content-type: application/json; charset=utf-8
< Content-Length: 129
< Date: Mon, 13 Jul 2020 01:14:36 GMT
< Server: lighttpd/1.4.42-devel-1476
<
{"device_list_table":[{"switch_mac":"00-40-c7-17-00-aa","device_list":[],"switch_addr":"192.168.1.3","device_name":"SM8TAT2SA"}]}* Connection #0 to host 192.168.1.77 left intact

```

## Record of Revisions

Rev.	Date	Description
A	8/25/20	Initial release for SMxTAT2SA Series at FW v1.03.1490 and API-04172020 (003) and SM8TAT2SA-DC at FW v1.02.1476.