SISPM1040-582-LRT

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>	
sessid	String	<cookie>	

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":    "SISPM1040-582-LRT",
                "description": "Managed Hardened PoE++ Switch (8) 10/100/1000Base-T PoE++ Ports + (2)
                 100/1000Base-X SFP Slot",
                "hardware_version": "v1.01",
                "mechanical_version": "v1.01",
                "firmware_version": " VB7.20.0016 2020-07-03",
                "mac_addr": "00-11-22-33-44-55",
                "serial_number": "A151118AR2500003",
                "system_name": "SISPM1040-582-LRT",
                "location": "",
                "contact": "",
                "system_date": "2011-01-01T00:01:30+00:00",
                "uptime": "17:56:09",
                "cpu_load": "23%, 10%, 15%",
                "ram": {
                    "total": "72008 KBytes",
                    "free": "49098 KBytes"
                },
                "temperature_1":38,
                "temperature_2":38
            }
        }
}
```

5. Set System Information

URL: /api/set_sysinfo

Method: POST

Request JSON:

```
{
        "system": {
            "information": {
                "system_name": "SISPM1040-582-LRT",
                "location": "Test Location",
                "contact": "Test Contact"
            }
        }
}
```

Response JSON:

```
{
        "system": {
            "information": {
                "system_name": "SISPM1040-582-LRT",
                "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	

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	Allowed / Value
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": 480
        },
        "ports": [
        {
            "id": 1,
            "poe":{
                "mode": "8023bt",
                "priority": "Low",
                "schedule": "Disabled",
                "lldp": true,
                "legacy": false
            }
        },
        … … …
        ]
}
```

Section:

Name	Data type	Allowed / Value
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": false
             }
        },
        … … …
        ]
}
```

Response JSON:

```
{
        "poe": {
             "total_power_watts": 480
        },
        "ports": [
        {
             "id": 1,
             "poe":{
                  "mode": "8023bt",
                  "priority": "Low",
                  "schedule": "Disabled",
                  "lldp": true,
                  "legacy": false
             }
        },
        … … …
        ]
}
```

Section:

Name	Data type	Allowed / Value	Default Value
power_determined_mode	String	"Class"、"Allocation"、"LLDP-Med"	Allocation
power_management_mode	String	"Actual Consumption"、"Reserved Power"	Actual Consumption
capacitor_detection	Boolean		false

id	Integer	<Port number>	
mode	String	" Disabled "、"4pair60w"、"4pair90w "、"8023bt"	8023bt
priority	String	"Low"、"High"、"Critical"	Low
power_limit_user	Integer	1-30 watt	30
schedule	String	"Disabled"、<Profile Name>	Disabled
lldp	Boolean		true
legacy	Boolean		false

9. Get Port Statistics

URL: /api/get_port_statistics

Method: GET

Request JSON: null

Response JSON:


```
{
        "ports": [
        {
                "id": 1,
                        "statistics": {
                                "rx_packets":      {
                                        "all": 93536,
                                        "octets": 11676072,
                                        "unicast": 44332,
                                        "multicast": 37536,
                                        "broadcast": 11672,
                                        "pause": 26816,
                                        "64 bytes": 55171,
                                        "65-127 bytes": 6235,
                                        "128-255 bytes": 5317,
                                        "256-511 bytes": 5841,
                                        "512-1023 bytes": 3493,
                                        "1024-1526 bytes": 1,
                                        "1527-max bytes": 0,
                                        "Q0":0,
                                        "Q1":0,
                                        "Q2":0,
                                        "Q3":0,
                                        "Q4":0,
                                        "Q5":0,
                                        "Q6":0,
                                        "Q7":0,
                                        "drop": 26816,
                                        "crc_alignment": 0,
```

```
                        "oversize": 0,
                        "undersize": 0,
                        "fragments": 0,
                        "jabber": 0,
                         “filtered”: 0
                    },
                    "tx_packets": {
                        "all": 130311,
                        "octets": 14036132,
                        "unicast": 9516,
                        "multicast": 1123,
                        "broadcast": 119672,
                        "pause": 0,
                        "64 bytes": 77115,
                        "65-127 bytes": 9511,
                        "128-255 bytes": 336,
                        "256-511 bytes": 302,
                        "512-1023 bytes": 1251,
                        "1024-1526 bytes": 2668,
                        "1527-max bytes": 0,
                        "Q0":0,
                        "Q1":0,
                        "Q2":0,
                        "Q3":0,
                        "Q4":0,
                        "Q5":0,
                        "Q6":0,
                        "Q7":0,
                        "drop": 0,
                         “late_excessive_collision”: 0
                    }
                }
            },
            … …
        ]
}
```

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,
                        "jumbo_frames": 9600,
                        "description": ""
                },
                … …
        ]
}
```

11. 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"
            },
            … …
        ]
}
```

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
jumbo_frames	Integer	1518-9600	9600
description	String	0-63 alphanumeric	

12. Firmware Upgrade

URL: /api/firmware_upgrade

Method: POST

Request JSON:

```
{
        "system": {
            "firmware": {
                "upgrade_url":"http://192.168.1.253/test.tar.gz"
            }
        }
}
```

Response JSON: null

Section:

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

13. Get Firmware Upgrade Status

URL: /api/get_firmware_upgrade_status

Method: GET

Request JSON: null

Response JSON:

```
{
        "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
        },
        … …
        ]
}
```

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

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

Section:

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

16. 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
        },
        … …
        ]
}
```

17. Save Configuration

URL: /api/save_configuration

Method: GET

Request JSON: null

Response JSON:

```
{
        " 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":"2011-01-01 00:20:24",
                "time_zone":"00",
                "acronym":"",
                "daylight":{
                    "mode": "disable",
                    "offset":1,
                    "start_time": {
                        "year": 2014,
                        "month": "Jan",
                        "week": 1,
                        "day": "Mon",
                        "date": 1,
                        "hour": 0,
                        "minute": 0
                    },
                    "end_time": {
                        "year": 2097,
                        "month": "Jan",
                        "week": 1,
                        "day": "Mon",
                        "date": 1,
                        "hour": 0,
                        "minute": 0
                    }
                }
            }
        }
}
```

19. Set System Time

URL: /api/set_system_time

Method: POST

Request JSON:

```
{
        "system": {
            "time": {
                "clock_source":"Use Local Settings",
                "system_date":"2020-09-30 12:28:30",
                "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": 2021,
                        "month": "Jan",
                        "week": 1,
                        "day": "Mon",
                        "date": 1,
                        "hour": 1,
                        "minute": 0
                    }
                }
            }
        }
}
```

Response JSON:

```
{
        "system": {
            "time": {
                "clock_source":"Local Setting",
                "system_date":"2020-09-30 12:28:30",
                "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": 2021,
                        "month": "Jan",
                        "week": 1,
                        "day": "Mon",
                        "date": 1,
                        "hour": 1,
                        "minute": 0
                    }
                }
            }
        }
}
```


Section:

Name	Data type	Allowed / Value	Default Value
clock_source	String	"Use Local Setting"、"Use NTP Server"	Use Local Setting
system_date	String	"[Year]-[Month]-[Day] [Hour]:[Minute]:[Second]"	
time_zone	String	See "Time Zone Mapping Table" below	
acronym	String	0-16 alphanumeric	
mode	String	"disable"、"recurring"、"non-recurring"	disable
offset	Integer	1-720 Min	60
year	Integer	2000-2097	2001
month	String	"Jan"、"Feb"、"Mar" "Apr"、"May"、"Jun" "Jul"、"Aug"、"Sep" "Oct"、"Nov"、"Dec"	Jan
week	Integer	1-5	1
day	String	"Mon"、"Tue"、"Wed" "Thu"、"Fri"、"Sat"、"Sun"	Mon
date	Integer	1-31	1
hour	Integer	0-23	0
minute	Integer	0-59	0

Time Zone Mapping Table:

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

20. Get NTP Server

URL: /api/get_ntp_server

Method: GET

Request JSON: null

Response JSON:


```
{
        "system": {
            "ntp":      {
                "automatic": true,
                "interval": 60,
                "server1": "ntp1.transition.com",
                "server2": "ntp2. transition.com",
                "server3": "",
                "server4": "",
                "server5": ""
            }
        }
}
```

21. Set NTP Server

URL: /api/set_ntp_server

Method: POST

Request JSON:

```
{
        "system": {
            "ntp":      {
                "automatic": true,
                "interval": 60,
                "server1": "ntp1. transition.com",
                "server2": "ntp2. transition.com",
                "server3": "",
                "server4": "",
                "server5": ""
            }
        }
}
```

Response JSON:

```
{
        "system": {
            "ntp":      {
                "automatic": true,
                "interval": 60,
                "server1": "ntp1. transition.com",
                "server2": "ntp2. transition.com",
                "server3": "",
                "server4": "",
                "server5": ""
            }
        }
}
```

Section:

Name	Data type	Allowed / Value	Default Value
automatic	Boolean		False
Interval	Integer	5、10、15、30、60、120 min	60
server1	String	Provide the IPv4 or IPv6 address of a NTP server.	
server2	String	Provide the IPv4 or IPv6 address of a NTP server.	
server3	String	Provide the IPv4 or IPv6 address of a NTP server.	
server4	String	Provide the IPv4 or IPv6 address of a NTP server.	
server5	String	Provide the IPv4 or IPv6 address of a NTP server.	

22. Get Syslog Server

URL: /api/get_syslog_server

Method: GET

Request JSON: null

Response JSON:

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

23. Set Syslog Server

URL: /api/set_syslog_server

Method: POST

Request JSON:

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

Response JSON:

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

Section:

Name	Data type	Allowed / Value	Default Value
mode	Boolean		false
server_address	String	<IPv4 address>	

server_port	Integer	1-65535	514

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,
                    "forbidden_vlan": "3,5"
                },
                "trunk": {
                    "pvid": 1,
                    "egress_tagging": "Untag Port VLAN",
                    "allowed_vlan": "1",
                    "forbidden_vlan": ""
                },
                "hybrid": {
                    "pvid": 1,
                    "port_type": "C-Port",
                    "ingress_filter": false,
                    "ingress_accept": "Tagged and Untagged",
                    "egress_tagging": "Untag Port VLAN",
                    "allowed_vlan": "1",
                    "forbidden_vlan": ""
                }
            }
        },
        … …
        ]
}
```

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,
                    "forbidden_vlan": "3,5"
                }
            }
        },{
            "id": 3,
            "vlan": {
                "mode": "Trunk",
                "trunk": {
                    "pvid": 1,
                    "egress_tagging": "Untag Port VLAN",
                    "allowed_vlan": "1",
                    "forbidden_vlan": "3,5"
                }
            }
        },{
            "id": 4,
            "vlan": {
                "mode": "Hybrid",
                "hybrid": {
                    "pvid": 1,
                    "port_type": "C-Port",
                    "ingress_filter": false,
                    "ingress_accept": "Tagged and Untagged",
                    "egress_tagging": "Untag Port VLAN",
                    "allowed_vlan": "1",
                    "forbidden_vlan": "3-5"
                }
            }
        },
        … …
```

```
        ]
}
```

Response JSON:

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

```
}
```

Section:

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

26. Get Mac Based Vlan Config

URL: /api/get_mac_based_vlan

Method: GET

Request JSON: null

Response JSON:

```
{
        "vlan":{
            "mac_based_vlan": [{
                "mac": "11-22-33-44-55-66",
                "vid": 15,
                "members": "2,5-6"
            }
            … …
            ]
        }
}
```

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,
                        "current_lease": "192.168.1.77/24",
                        "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,
                        "static_addr": "192.168.1.86",
                        "static_mask": 24
                    },
                    "ipv6": {
                        "static_addr": "",
                        "static_mask": 0
                    }
                }
                … …
                ]
            }
        }
}
```

Response JSON:

```
{
        "system": {
            "ip": {
                "interfaces": [{
                    "vid": 1,
                    "ipv4": {
                        "dhcp": false,
                        "fallback": 0,
                        "current_lease": "192.168.1.86/24",
                        "static_addr": "192.168.1.86",
                        "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	

29. Get Mirror Config

URL: /api/get_mirror_config

Method: GET

Request JSON: null

Response JSON:

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

30. Set Mirror Config

URL: /api/set_mirror_config

Method: POST

Request JSON:

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

Response JSON:

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

Section:

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

Note: Only support mirror mode.

31. Cable Diagnostic

URL: /api/cable_diagnostics

Method: POST

Request JSON:

```
{
        "cable": {
              "port": 1
        }
}
```

Response JSON:

```
{
    "diagnostic":  {
         "cable":     {
              "port": 1,
              "link_status":  "Link Down",
              "test_result":  "detect error or check cable length is between 7-120 meters",
              "length":     "0"
         }
    }
}*
```

Section:

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

32. Device List Table

URL: /api/dev_list_table

Method: GET

Request JSON: null

Response JSON:


```
{
        "device_list_table":
        [{
                "switch_mac":  "00-c0-f2-49-39-5c",
                "device_list":  [{
                        "poe_used":    52,
                        "status":      "on",
                        "device_type":  "SWITCH",
                        "model_name":  "SM8TAT2SA",
                        "device_name":  "SM8TAT2SA",
                        "mac":  "00-40-c7-1c-8c-57",
                        "ip_addr":     "192.168.1.75",
                        "rx_rate":     0,
                        "port_no":     8,
                        "link_partner_port_no": 8,
                        "events":      [],
                        "number_of_alarm_events":      0
                    }],
                "switch_addr":  "192.168.1.85",
                "device_name":  "SISPM1040-582-LRT"
        }]
}
```


Section:

Name	Data type	Unit
poe_used	Integer	0.1 watt
rx_rate	Integer	byte

33. Get DI/DO Config

URL: api/get_di_do_config

Method: GET

Request JSON: null

Response JSON:

```
{
    "system":    {
        "di_do":    {
            "digital_out_mode":    true,
            "di_normal_mode":    "Low",
            "di_normal_description":    "DI Normal",
            "di_abnormal_description":    "DI Abnormal",
            "do_normal_mode":    "Open",
            "auto_recovery":    true
        }
    }
}
```

34. Set DI/DO Config

URL: api/set_di_do_config

Method: POST

Request JSON:

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

Response JSON:

```
{
    "system":    {
        "di_do":    {
            "digital_out_mode":    false,
            "di_normal_mode":    "High",
            "di_normal_description":    "",
```

```
            "di_abnormal_description":    "",
            "do_normal_mode":     "Open",
            "auto_recovery":      false
        }
    }
}
```

Section:

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

35. Get DI/DO Status

URL: api/get_di_do_status

Method: GET

Request JSON: null

Response JSON:

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

Section:

Name	Data type	Allowed / Value	Default Value
di-status	String	"Normal" 、"Abnormal"	Normal
do_status	String	"Normal" 、"Abnormal"	Normal
do_relay_status	String	true	(support set only)

36. Set DO Relay

URL: /api/set_di_do_relay

Method: POST

Request JSON: null

Response JSON:


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

cURL Commands v 1.0

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\": \"SISPM1040-582-LRT\",\"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\": false}}]}" 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\":\"2017-07-01 01:01:30\",\"time_zone\":\"5400\",\"acronym\":\"\",\"daylight\":{\"mode\":\"disable\",\"offset\":60,\"start_time\":{\"year\": 2001,\"month\": \"Jan\",\"week\": 1,\"day\": \"Mon\",\"date\": 1,\"hour\": 1,\"minute\": 0},\"end_time\": {\"year\": 2021,\"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\":\"ntp1.transition.com\",\"server2\": \"ntp2.transition.com\",\"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\": true,\"server_address\": \"192.168.111.188\",\"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,\"forbidden_vlan\": \"3,5\"}}},{\"id\": 3,\"vlan\": {\"mode\": \"Trunk\",\"trunk\": {\"pvid\": 1,\"egress_tagging\": \"Untag Port VLAN\",\"allowed_vlan\": \"1\",\"forbidden_vlan\": \"3,5\"}}},{\"id\": 4,\"vlan\": {\"mode\": \"Hybrid\",\"hybrid\": {\"pvid\": 1,\"port_type\": \"C-Port\",\"ingress_filter\": false,\"ingress_accept\": \"Tagged and Untagged\",\"egress_tagging\": \"Untag Port VLAN\",\"allowed_vlan\": \"1\",\"forbidden_vlan\": \"3-5\"}}}]}" 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\": \"4,6-8\",\"source_rx\": \"3,5,7-8\"}]}}" 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

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

curl -v --cookie "seid=123456789" -d "{\"system\":{\"di_do\": {\"digital_out_mode\": false,\"di_normal_mode\": \"High\",\"di_normal_description\": \"\",\"di_abnormal_description\": \"\",\"do_normal_mode\": \"Open\",\"auto_recovery\": false}}}" http://192.168.1.77/api/set_di_do_config

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

curl -v --cookie "seid=123456789" -d "{\"system\":{\"di_do\": {\"do_relay_status\": true}}}" http://192.168.1.77/api/set_di_do_relay

Record of Revisions

Rev.	Date	Description
A	11/19/20	Initial release for SISPM1040-582-LRT FW VB7.10.2658 (with bt support). Upgrade to FW vB7.10.2706, then upgrade to vB7.10.2710. Add cURL Commands v 1.0. Update for FW vB7.20.0016; add support for get/set DI/DO via API and add DIDO cURL commands v1.0.

Note: Minimum version of firmware required: VB7.10.2658.

Warning: The switches must be upgraded to vB7.10.2706 first, and then be upgraded to vB7.20.0016.

Note: Once the SISPM1040-582-LRT is upgraded to vB7.10.2706 from v7.10.2294, there is no way to fall back to the old firmware version.