

SM24DP4XA

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": "375118820"
  }
}
```

Response JSON:

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

Section:

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

2. Logout

URL: /api/logout

Method: POST

Request JSON:

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

Response JSON:

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

Section:

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

3. Reboot

URL: /api/reboot

Method: POST

Request JSON:

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

Response JSON: null

Section:

Name	Data type	Allowed / Value	Default Value
warm	String	"Yes"	

4. Get System Information

URL: /api/get_sysinfo

Method: GET

Request JSON: null

Response JSON:

```
{
  "system": {
    "information": {
      "model_name": "SM24DP4XA",
      "description": "Managed Gigabit Ethernet Fiber Switch (20) 100/1000Base-X SFP Slots + (4) 100/1000Base SFP/RJ-45 Combo Ports + (4) 1G/10GBase-X",
      "hardware_version": "v1.01.1",
      "mechanical_version": "v1.01",
      "firmware_version": "v7.20.0042 2021-01-19",
      "mac_addr": "00-40-c7-a1-cd-25",
      "serial_number": "A062118AR3700004",
      "system_name": "SM24DP4XA",
      "location": "",
      "contact": "",
      "system_date": "2017-01-01T01:44:55+09:00",
      "uptime": "17:56:09",
      "cpu_load": "51%, 25%, 17%",
      "ram": {
        "total": "72008 KBytes",
        "free": "49098 KBytes"
      },
      "temperature_1": 50,
      "temperature_2": 64
    }
  }
}
```

5. Set System Information

URL: /api/set_sysinfo

Method: POST

Request JSON:

```
{
  "system": {
    "information": {
      "system_name": "SM24DP4XA",
      "location": "Test Location",
      "contact": "Test Contact"
    }
  }
}
```

Response JSON:

```
{
  "system": {
    "information": {
      "system_name": "SM24DP4XA",
      "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 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
      }
    },
    ... ..
  ]
}
```

7. 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": ""
    },
    ... ..
  ]
}
```


8. Set Port Config

URL: /api/set_port_config

Method: POST

Request JSON:

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

Response JSON:

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

Section:

Name	Data type	Allowed / Value	Default Value
id	Integer	<Port number>	
speed_mode	String	"Disabled" "Auto" "10Mbps HDX"	Auto

		"10Mbps FDX" "100Mbps HDX" "100Mbps FDX" "1Gbps FDX"	
flow_control	Boolean		false
jumbo_frames	Integer	1518-9600	9600
description	String	0-63 alphanumeric	

9. Firmware Upgrade

URL: /api/firmware_upgrade

Method: POST

Request JSON:

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

Response JSON: null

Section:

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

10. Get Firmware Upgrade Status

URL: /api/get_firmware_upgrade_status

Method: GET

Request JSON: null

Response JSON:

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

11. Get Account Configuration

URL: /api/get_account_config

Method: GET

Request JSON: null

Response JSON:

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

12. Set Account Configuration

URL: /api/set_account_config

Method: POST

Request JSON:

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

Response JSON:

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

Section:

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

Note: Only modify one at a time.

13. Get MAC Table Information

URL: /api/get_dynamic_mac_table

Method: GET

Request JSON: null

Response JSON:

```
{
  "mac_table": [{
    "type": "Dynamic",
    "mac": "00-11-22-33-44-55-66",
    "vid": 1,
    "port": 9
  },
  ... ..
]
```

14. Save Configuration

URL: /api/save_configuration

Method: GET

Request JSON: null

Response JSON:

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

15. Get System Time

URL: /api/get_system_time

Method: GET

Request JSON: null

Response JSON:

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

16. Set System Time

URL: /api/set_system_time

Method: POST

Request JSON:

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

Response JSON:

```

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

```

Section:

Name	Data type	Allowed / Value	Default Value
clock_source	String	"Use Local Setting" 、 "Use NTP Server"	Use Local Setting
system_date	String	"[Year]-[Month]-[Day] [Hour]:[Minute]:[Second]"	
time_zone	String	Reference "Time Zone Mapping Table"	

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)

17. Get NTP Server

URL: /api/get_ntp_server

Method: GET

Request JSON: null

Response JSON:

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

18. Set NTP Server

URL: /api/set_ntp_server

Method: POST

Request JSON:

```
{
  "system": {
    "ntp": {
      "automatic": true,
      "interval": 60,
      "server1": "ntp.transition.com",
      "server2": "ntp.transition 1.com",
      "server3": "",
      "server4": "",
      "server5": ""
    }
  }
}
```

Response JSON:

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

Section:

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

srver2	String	Provide the IPv4 or IPv6 address of a NTP server.	
srver3	String	Provide the IPv4 or IPv6 address of a NTP server.	
srver4	String	Provide the IPv4 or IPv6 address of a NTP server.	
srver5	String	Provide the IPv4 or IPv6 address of a NTP server.	

19. Get Syslog Server

URL: /api/get_syslog_server

Method: GET

Request JSON: null

Response JSON:

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

20. 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

21. 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": ""
    }
}
},
... ..
]
}

```

22. Set Vlan Config

URL: /api/set_vlan_config

Method: POST

Request JSON:

```

{
  "vlan": {
    "allowed_access_vlans": "1",
    "ethertype_custom_s_ports": "88a8"
  },
  "ports": [{
    "id": 2,
    "vlan": {
      "mode": "Access",
      "access": {
        "pvid": 1,
        "forbidden_vlan": "3,5"
      }
    }
  }, {
    "id": 3,
    "vlan": {
      "mode": "Trunk",
      "trunk": {
        "pvid": 1,
        "egress_tagging": "Untag Port VLAN",
        "allowed_vlan": "1",

```

```

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

```

Response JSON:

```

{
    "vlan": {
        "allowed_access_vlans": "1",
        "ethertype_custom_s_ports": "88a8"
    },
    "ports": [{
        "id": 1,
        "vlan": {
            "mode": "Access",
            "access": {
                "pvid": 1,
                "forbidden_vlan": "3,5"
            },
            "trunk": {
                "pvid": 1,
                "egress_tagging": "Untag Port VLAN",
            }
        }
    ]
}

```

```

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

```

Section:

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

23. 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,
      "members": "2,5-6"
    }
    ...
  ]
}
```

24. Get IP Address

URL: /api/get_ip_address

Method: GET

Request JSON: null

Response JSON:

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

```
    }  
  }  
  ... ..  
]  
}  
}
```

25. Set IP Address

URL: /api/set_ip_address

Method: POST

Request JSON:

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

Response JSON:

```
{  
  "system": {  
    "ip": {  
      "interfaces": [{
```

```

        "vid": 1,
        "ipv4": {
            "dhcp": false,
            "fallback": 0,
            "current_lease": "192.168.111.126/24",
            "static_addr": "192.168.111.126",
            "static_mask": 24
        },
        "ipv6": {
            "static_addr": "",
            "static_mask": 0
        }
    }
    ... ..
]
}
}
}

```

Section:

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

26. 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"
    }]
  }
}
```

27. 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.

28. Cable Diagnostic

URL: /api/cable_diagnostics

Method: POST

Request JSON:

```
{
  "cable": {
    "port": 2
  }
}
```

Response JSON:

```
{
  "ports": {
    "id": 2,
    "cable_diagnostic": {
      "link": "1G",
      "result": "OK",
      "length": "24"
    }
  }
}
```

Section:

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

29. 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

30. Get ACL Config

URL: /api/get_acl_config

Method: GET

Request JSON: null

Response JSON:

```
{
  "acl": {
    "ace": [{
      "id": 1,
      "ingress_port": "1-12",
      "policy": {
        "filter": "Any",
        "value": 0,
        "bitmask": "FF"
      },
      "action": {
        "mode": "Permit",
        "rate_limiter": 0,
        "evc_policer": false,
        "evc_policer_id": 1,
        "mirror": false,
        "logging": false,
        "shutdown": false,
        "counter": 5146,
        "deny_port_redirect": "0",
        "filter_port": "1-12"
      },
      "vlan": {
        "tagged": "Any",
        "filter": "Any",
        "id": 0,
        "tag_priority": "Any"
      },
      "frame_type": "any"
    }, {
      "id": 2,
      "ingress_port": "1",
      "policy": {
```

```

        "filter": "Specific",
        "value": 0,
        "bitmask": "FF"
    },
    "action": {
        "mode": "Permit",
        "rate_limiter": 0,
        "evc_policer": true,
        "evc_policer_id": 1,
        "mirror": false,
        "logging": false,
        "shutdown": true,
        "counter": 0,
        "deny_port_redirect": "0",
        "filter_port": "1-12"
    },
    "vlan": {
        "tagged": "Enabled",
        "filter": "Specific",
        "id": 1,
        "tag_priority": "4-7"
    },
    "frame_type": "ethernet",
    "ethernet": {
        "smac_filter": "Specific",
        "smac": "00-00-00-00-00-01",
        "smac_mask": "ffff",
        "dmac_filter": "Specific",
        "dmac": "00-00-00-00-00-02",
        "dmac_mask": "2",
        "ether_type_filter": "Specific",
        "ether_type": "ffff"
    }
}, {
    "id": 3,
    "ingress_port": "2-3",
    "policy": {
        "filter": "Any",
        "value": 0,

```

```
        "bitmask": "FF"
    },
    "action": {
        "mode": "Permit",
        "rate_limiter": 10,
        "evc_policer": false,
        "evc_policer_id": 1,
        "mirror": false,
        "logging": false,
        "shutdown": false,
        "counter": 0,
        "deny_port_redirect": "0",
        "filter_port": "1-12"
    },
    "vlan": {
        "tagged": "Enabled",
        "filter": "Specific",
        "id": 1,
        "tag_priority": "0"
    },
    "frame_type": "arp",
    "arp": {
        "smac_filter": "Specific",
        "smac": "00-00-00-00-00-01",
        "dmac_filter": "BC",
        "parameters": {
            "type": "Other",
            "op": "Any",
            "sender": {
                "filter": "Network",
                "address": "0.0.0.0",
                "mask": "255.255.255.0"
            },
            "target": {
                "filter": "Network",
                "address": "0.0.0.0",
                "mask": "255.255.255.0"
            }
        }
    },
    },
```

```
        "arp_smac_match": "Any",
        "rarp_dmac_match": "Any",
        "arp_ip_eth_len": "Any",
        "arp_ip": "Any",
        "arp_eth": "Any"
    }
}, {
    "id": 4,
    "ingress_port": "10-12",
    "policy": {
        "filter": "Any",
        "value": 0,
        "bitmask": "FF"
    },
    "action": {
        "mode": "Permit",
        "rate_limiter": 0,
        "evc_policer": false,
        "evc_policer_id": 1,
        "mirror": false,
        "logging": false,
        "shutdown": false,
        "counter": 0,
        "deny_port_redirect": "0",
        "filter_port": "1-12"
    },
    "vlan": {
        "tagged": "Any",
        "filter": "Any",
        "id": 0,
        "tag_priority": "Any"
    },
    "frame_type": "ipv4",
    "ipv4": {
        "dmac_filter": "MC",
        "protocol_filter": "ICMP",
        "protocol_value": 1,
        "ip_ttl": "Non-zero",
        "ip_fragment": "No",
```

```

        "ip_option": "Any",
        "sip_filter": "Network",
        "sip_address": "0.0.0.0",
        "sip_mask": "255.255.255.0",
        "dip_filter": "Network",
        "dip_address": "0.0.0.0",
        "dip_mask": "255.255.255.0",
        "icmp": {
            "type_filter": 1,
            "type_value": 255,
            "code_filter": 1,
            "code_value": 255
        },
        "udp": {
            "sport_filter": 0,
            "sport_start": 0,
            "sport_end": 0,
            "dport_filter": 0,
            "dport_start": 0,
            "dport_end": 0
        },
        "tcp": {
            "sport_filter": 0,
            "sport_start": 0,
            "sport_end": 0,
            "dport_filter": 0,
            "dport_start": 0,
            "dport_end": 0,
            "fin": 0,
            "syn": 0,
            "rst": 0,
            "psh": 0,
            "ack": 0,
            "urg": 0
        }
    }, {
        "id": 5,
        "ingress_port": "1-12",

```

```
"policy": {
  "filter": "Any",
  "value": 0,
  "bitmask": "FF"
},
"action": {
  "mode": "Permit",
  "rate_limiter": 0,
  "evc_policer": false,
  "evc_policer_id": 1,
  "mirror": false,
  "logging": false,
  "shutdown": false,
  "counter": 0,
  "deny_port_redirect": "0",
  "filter_port": "1-12"
},
"vlan": {
  "tagged": "Any",
  "filter": "Any",
  "id": 0,
  "tag_priority": "Any"
},
"frame_type": "ipv4",
"ipv4": {
  "dmac_filter": "Any",
  "protocol_filter": "UDP",
  "protocol_value": 2,
  "ip_ttl": "Any",
  "ip_fragment": "Any",
  "ip_option": "Any",
  "sip_filter": "Any",
  "sip_address": "0.0.0.0",
  "sip_mask": "0.0.0.0",
  "dip_filter": "Any",
  "dip_address": "0.0.0.0",
  "dip_mask": "0.0.0.0",
  "icmp": {
    "type_filter": 0,
```

```
        "type_value": 0,
        "code_filter": 0,
        "code_value": 0
    },
    "udp": {
        "sport_filter": 2,
        "sport_start": 1,
        "sport_end": 22,
        "dport_filter": 2,
        "dport_start": 2,
        "dport_end": 33
    },
    "tcp": {
        "sport_filter": 0,
        "sport_start": 0,
        "sport_end": 0,
        "dport_filter": 0,
        "dport_start": 0,
        "dport_end": 0,
        "fin": 0,
        "syn": 0,
        "rst": 0,
        "psh": 0,
        "ack": 0,
        "urg": 0
    }
}, {
    "id": 6,
    "ingress_port": "1-12",
    "policy": {
        "filter": "Any",
        "value": 0,
        "bitmask": "FF"
    },
    "action": {
        "mode": "Permit",
        "rate_limiter": 0,
        "evc_policer": false,
```

```
        "evc_policer_id": 1,
        "mirror": false,
        "logging": false,
        "shutdown": false,
        "counter": 0,
        "deny_port_redirect": "0",
        "filter_port": "1-12"
    },
    "vlan": {
        "tagged": "Any",
        "filter": "Any",
        "id": 0,
        "tag_priority": "Any"
    },
    "frame_type": "ipv4",
    "ipv4": {
        "dmac_filter": "Any",
        "protocol_filter": "TCP",
        "protocol_value": 2,
        "ip_ttl": "Any",
        "ip_fragment": "Any",
        "ip_option": "Any",
        "sip_filter": "Any",
        "sip_address": "0.0.0.0",
        "sip_mask": "0.0.0.0",
        "dip_filter": "Any",
        "dip_address": "0.0.0.0",
        "dip_mask": "0.0.0.0",
        "icmp": {
            "type_filter": 0,
            "type_value": 0,
            "code_filter": 0,
            "code_value": 0
        },
        "udp": {
            "sport_filter": 0,
            "sport_start": 0,
            "sport_end": 0,
            "dport_filter": 0,
```



```
        "dport_start": 0,
        "dport_end": 0
    },
    "tcp": {
        "sport_filter": 2,
        "sport_start": 1,
        "sport_end": 22,
        "dport_filter": 2,
        "dport_start": 2,
        "dport_end": 33,
        "fin": 0,
        "syn": 2,
        "rst": 2,
        "psh": 2,
        "ack": 1,
        "urg": 2
    }
}
}, {
    "id": 7,
    "ingress_port": "1-12",
    "policy": {
        "filter": "Any",
        "value": 0,
        "bitmask": "FF"
    },
    "action": {
        "mode": "Permit",
        "rate_limiter": 0,
        "evc_policer": false,
        "evc_policer_id": 1,
        "mirror": false,
        "logging": false,
        "shutdown": false,
        "counter": 0,
        "deny_port_redirect": "0",
        "filter_port": "1-12"
    },
    "vlan": {
```

```
        "tagged": "Any",
        "filter": "Any",
        "id": 0,
        "tag_priority": "Any"
    },
    "frame_type": "ipv4",
    "ipv4": {
        "dmac_filter": "Any",
        "protocol_filter": "Specific",
        "protocol_value": 2,
        "ip_ttl": "Any",
        "ip_fragment": "Any",
        "ip_option": "Any",
        "sip_filter": "Any",
        "sip_address": "0.0.0.0",
        "sip_mask": "0.0.0.0",
        "dip_filter": "Any",
        "dip_address": "0.0.0.0",
        "dip_mask": "0.0.0.0",
        "icmp": {
            "type_filter": 0,
            "type_value": 0,
            "code_filter": 0,
            "code_value": 0
        },
        "udp": {
            "sport_filter": 0,
            "sport_start": 0,
            "sport_end": 0,
            "dport_filter": 0,
            "dport_start": 0,
            "dport_end": 0
        },
        "tcp": {
            "sport_filter": 0,
            "sport_start": 0,
            "sport_end": 0,
            "dport_filter": 0,
            "dport_start": 0,
```

```

        "dport_end": 0,
        "fin": 0,
        "syn": 0,
        "rst": 0,
        "psh": 0,
        "ack": 0,
        "urg": 0
    }
}
}, {
    "id": 8,
    "ingress_port": "1-12",
    "policy": {
        "filter": "Any",
        "value": 0,
        "bitmask": "FF"
    },
    "action": {
        "mode": "Permit",
        "rate_limiter": 0,
        "evc_policer": false,
        "evc_policer_id": 1,
        "mirror": false,
        "logging": false,
        "shutdown": false,
        "counter": 0,
        "deny_port_redirect": "0",
        "filter_port": "1-12"
    },
    "vlan": {
        "tagged": "Any",
        "filter": "Any",
        "id": 0,
        "tag_priority": "Any"
    },
    "frame_type": "ipv6",
    "ipv6": {
        "dmac_filter": "Any",
        "next_header_filter": "ICMP",

```

```
        "next_header_value": 58,
        "sip_filter": "Specific",
        "sip_address": "::",
        "sip_bitmask": "FFFFFFFF",
        "hop_limit": "1",
        "icmp": {
            "type_filter": 1,
            "type_value": 255,
            "code_filter": 1,
            "code_value": 255
        },
        "udp": {
            "sport_filter": 0,
            "sport_start": 0,
            "sport_end": 0,
            "dport_filter": 0,
            "dport_start": 0,
            "dport_end": 0
        },
        "tcp": {
            "sport_filter": 0,
            "sport_start": 0,
            "sport_end": 0,
            "dport_filter": 0,
            "dport_start": 0,
            "dport_end": 0,
            "fin": 0,
            "syn": 0,
            "rst": 0,
            "psh": 0,
            "ack": 0,
            "urg": 0
        }
    }, {
        "id": 9,
        "ingress_port": "1-12",
        "policy": {
            "filter": "Any",
```

```
        "value": 0,
        "bitmask": "FF"
    },
    "action": {
        "mode": "Permit",
        "rate_limiter": 0,
        "evc_policer": false,
        "evc_policer_id": 1,
        "mirror": false,
        "logging": false,
        "shutdown": false,
        "counter": 0,
        "deny_port_redirect": "0",
        "filter_port": "1-12"
    },
    "vlan": {
        "tagged": "Any",
        "filter": "Any",
        "id": 0,
        "tag_priority": "Any"
    },
    "frame_type": "ipv6",
    "ipv6": {
        "dmac_filter": "Any",
        "next_header_filter": "UDP",
        "next_header_value": 17,
        "sip_filter": "Specific",
        "sip_address": "::",
        "sip_bitmask": "FFFFFFFF",
        "hop_limit": "Any",
        "icmp": {
            "type_filter": 0,
            "type_value": 0,
            "code_filter": 0,
            "code_value": 0
        },
        "udp": {
            "sport_filter": 1,
            "sport_start": 33,
```

```

        "sport_end": 33,
        "dport_filter": 2,
        "dport_start": 2,
        "dport_end": 33
    },
    "tcp": {
        "sport_filter": 0,
        "sport_start": 0,
        "sport_end": 0,
        "dport_filter": 0,
        "dport_start": 0,
        "dport_end": 0,
        "fin": 0,
        "syn": 0,
        "rst": 0,
        "psh": 0,
        "ack": 0,
        "urg": 0
    }
}
}, {
    "id": 10,
    "ingress_port": "1-12",
    "policy": {
        "filter": "Any",
        "value": 0,
        "bitmask": "FF"
    },
    "action": {
        "mode": "Permit",
        "rate_limiter": 0,
        "evc_policer": false,
        "evc_policer_id": 1,
        "mirror": false,
        "logging": false,
        "shutdown": false,
        "counter": 0,
        "deny_port_redirect": "0",
        "filter_port": "1-12"
    }
}

```

```
    },
    "vlan": {
        "tagged": "Any",
        "filter": "Any",
        "id": 0,
        "tag_priority": "Any"
    },
    "frame_type": "ipv6",
    "ipv6": {
        "dmac_filter": "Any",
        "next_header_filter": "TCP",
        "next_header_value": 6,
        "sip_filter": "Any",
        "sip_address": "",
        "sip_bitmask": "0",
        "hop_limit": "Any",
        "icmp": {
            "type_filter": 0,
            "type_value": 0,
            "code_filter": 0,
            "code_value": 0
        },
        "udp": {
            "sport_filter": 0,
            "sport_start": 0,
            "sport_end": 0,
            "dport_filter": 0,
            "dport_start": 0,
            "dport_end": 0
        },
        "tcp": {
            "sport_filter": 1,
            "sport_start": 2,
            "sport_end": 2,
            "dport_filter": 2,
            "dport_start": 2,
            "dport_end": 33,
            "fin": 1,
            "syn": 2,
```

```
        "rst": 2,
        "psh": 2,
        "ack": 2,
        "urg": 2
    }
}
}, {
    "id": 11,
    "ingress_port": "1-12",
    "policy": {
        "filter": "Any",
        "value": 0,
        "bitmask": "FF"
    },
    "action": {
        "mode": "Permit",
        "rate_limiter": 0,
        "evc_policer": false,
        "evc_policer_id": 1,
        "mirror": false,
        "logging": false,
        "shutdown": false,
        "counter": 0,
        "deny_port_redirect": "0",
        "filter_port": "1-12"
    },
    "vlan": {
        "tagged": "Any",
        "filter": "Any",
        "id": 0,
        "tag_priority": "Any"
    },
    "frame_type": "ipv6",
    "ipv6": {
        "dmac_filter": "Any",
        "next_header_filter": "Specific",
        "next_header_value": 255,
        "sip_filter": "Any",
        "sip_address": " "
```



```

        "sip_bitmask": "0",
        "hop_limit": "Any",
        "icmp": {
            "type_filter": 0,
            "type_value": 0,
            "code_filter": 0,
            "code_value": 0
        },
        "udp": {
            "sport_filter": 0,
            "sport_start": 0,
            "sport_end": 0,
            "dport_filter": 0,
            "dport_start": 0,
            "dport_end": 0
        },
        "tcp": {
            "sport_filter": 0,
            "sport_start": 0,
            "sport_end": 0,
            "dport_filter": 0,
            "dport_start": 0,
            "dport_end": 0,
            "fin": 0,
            "syn": 0,
            "rst": 0,
            "psh": 0,
            "ack": 0,
            "urg": 0
        }
    }, {
        "id": 12,
        "ingress_port": "1-8",
        "policy": {
            "filter": "Any",
            "value": 0,
            "bitmask": "FF"
        }
    },

```

```
"action": {
  "mode": "Filter",
  "rate_limiter": 0,
  "evc_policer": false,
  "evc_policer_id": 1,
  "mirror": false,
  "logging": false,
  "shutdown": false,
  "counter": 0,
  "deny_port_redirect": "0",
  "filter_port": "1-12"
},
"vlan": {
  "tagged": "Any",
  "filter": "Any",
  "id": 0,
  "tag_priority": "5"
},
"frame_type": "ipv6",
"ipv6": {
  "dmac_filter": "Any",
  "next_header_filter": "Any",
  "next_header_value": 0,
  "sip_filter": "Any",
  "sip_address": "",
  "sip_bitmask": "0",
  "hop_limit": "1",
  "icmp": {
    "type_filter": 0,
    "type_value": 0,
    "code_filter": 0,
    "code_value": 0
  },
  "udp": {
    "sport_filter": 0,
    "sport_start": 0,
    "sport_end": 0,
    "dport_filter": 0,
    "dport_start": 0,
```

```
        "dport_end": 0
      },
      "tcp": {
        "sport_filter": 0,
        "sport_start": 0,
        "sport_end": 0,
        "dport_filter": 0,
        "dport_start": 0,
        "dport_end": 0,
        "fin": 0,
        "syn": 0,
        "rst": 0,
        "psh": 0,
        "ack": 0,
        "urg": 0
      }
    }
  }
}
```

31. Add ACL Config

URL: /api/add_acl_config

Method: POST

Request JSON:

Frame_type : any

```
{
  "acl": {
    "add": [{
      "any": {
        "ingress_port": "1-5",
        "policy": {
          "filter": "Any",
          "value": 0,
          "bitmask": "FF"
        },
        "action": {
          "mode": "Permit",
          "rate_limiter": 0,
          "evc_policer": true,
          "evc_policer_id": 1,
          "mirror": false,
          "logging": true,
          "shutdown": false,
          "deny_port_redirect": "0",
          "filter_port": "1-12"
        },
        "vlan": {
          "tagged": "Any",
          "filter": "Any",
          "vid": 0,
          "tag_priority": "Any"
        },
        "frame_type": "any"
      }
    ]
  }
}
```

Frame_type : ethernet

```
{
  "acl": {
    "add": [{
      "ethernet": {
        "ingress_port": "1-5",
        "action": {
          "mode": "filter",
          "deny_port_redirect": "6-10",
          "filter_port": "9-10",
          "logging": true,
          "mirror": true,
          "rate_limiter": 0,
          "evc_policer": false,
          "evc_policer_id": 1,
          "shutdown": false
        },
        "ethernet": {
          "dmac": "00-00-00-00-00-02",
          "dmac_filter": "Specific",
          "ether_type": "ffff",
          "ether_type_filter": "Any",
          "smac": "00-00-00-00-00-01",
          "smac_filter": "Specific"
        },
        "frame_type": "ethernet",
        "policy": {
          "bitmask": "7F",
          "filter": "Any",
          "value": 0
        },
        "vlan": {
          "filter": "Specific",
          "vid": 20,
          "tag_priority": "Any",
          "tagged": "Any"
        }
      }
    ]
  }
}
```

```
}  
}
```

Frame_type : arp

```
{  
  "acl": {  
    "add": [{  
      "arp": {  
        "ingress_port": "1-4",  
        "policy": {  
          "filter": "Any",  
          "value": 0,  
          "bitmask": "7F"  
        },  
        "action": {  
          "mode": "Permit",  
          "rate_limiter": 0,  
          "evc_policer": false,  
          "evc_policer_id": 1,  
          "mirror": false,  
          "logging": false,  
          "shutdown": false,  
          "deny_port_redirect": "0",  
          "filter_port": "1-12"  
        },  
        "vlan": {  
          "tagged": "Any",  
          "filter": "Any",  
          "vid": 0,  
          "tag_priority": "Any"  
        },  
        "frame_type": "arp",  
        "arp": {  
          "smac_filter": "Any",  
          "smac": "",  
          "dmac_filter": "Any",  
          "parameters": {  
            "type": "ARP",  
            "op": "Any",  
          }  
        }  
      }  
    ]  
  }  
}
```

```

        "sender": {
            "filter": "Host",
            "address": "0.0.0.0",
            "mask": ""
        },
        "target": {
            "filter": "Network",
            "address": "0.0.0.0",
            "mask": "255.255.255.0"
        }
    },
    "arp_smac_match": "Any",
    "rarp_dmac_match": "Any",
    "arp_ip_eth_len": "Any",
    "arp_ip": "Any",
    "arp_eth": "Any"
}
}
}

```

Frame_type : ipv4(Any)

```

{
    "acl": {
        "add": [{
            "ipv4": {
                "ingress_port": "1-8",
                "policy": {
                    "filter": "Any",
                    "value": "0",
                    "bitmask": "7F"
                },
            },
            "action": {
                "mode": "Filter",
                "rate_limiter": 0,
                "evc_policer": false,
                "evc_policer_id": 1,
                "mirror": false,
            }
        }
    ]
}

```

```

        "logging": false,
        "shutdown": false,
        "deny_port_redirect": "",
        "filter_port": "1-12"
    },
    "vlan": {
        "tagged": "Any",
        "filter": "Any",
        "vid": 0,
        "tag_priority": "5"
    },
    "frame_type": "ipv4",
    "ipv4": {
        "dmac_filter": "Any",
        "protocol_filter": "Any",
        "ip_ttl": "Zero",
        "ip_fragment": "Yes",
        "ip_option": "No",
        "sip_filter": "Any",
        "sip": "0.0.0.0",
        "sip_mask": "0.0.0.0",
        "dip_filter": "Any",
        "dip": "0.0.0.0",
        "dip_mask": "255.255.255.0"
    }
}

```

Frame_type : ipv4(ICMP)

```

{
    "acl": {
        "add": [{
            "ipv4": {
                "ingress_port": "1-10",
                "policy": {
                    "filter": "Any",
                    "value": 0,

```



```
        "bitmask": "7F"
    },
    "action": {
        "mode": "Permit",
        "rate_limiter": 0,
        "mirror": false,
        "logging": false,
        "shutdown": false,
        "deny_port_redirect": "",
        "filter_port": "1-12"
    },
    "vlan": {
        "tagged": "Any",
        "filter": "Any",
        "vid": 0,
        "tag_priority": "Any"
    },
    "frame_type": "ipv4",
    "ipv4": {
        "dmac_filter": "Any",
        "protocol_filter": "ICMP",
        "protocol_value": 1,
        "ip_ttl": "Any",
        "ip_fragment": "Any",
        "ip_option": "Any",
        "sip_filter": "Host",
        "sip": "192.168.1.3",
        "sip_mask": "255.255.255.255",
        "dip_filter": "Host",
        "dip": "192.168.1.4",
        "dip_mask": "255.255.255.255",
        "icmp": {
            "type_filter": 0,
            "type": 1,
            "code_filter": 1,
            "code": 2
        }
    }
}
```

```
    }}  
  }  
}
```

Frame_type : ipv4(UDP)

```
{  
  "acl": {  
    "add": [{  
      "ipv4": {  
        "ingress_port": "1-10",  
        "policy": {  
          "filter": "Any",  
          "value": 0,  
          "bitmask": "7F"  
        },  
        "action": {  
          "mode": "Permit",  
          "rate_limiter": 0,  
          "mirror": false,  
          "logging": false,  
          "shutdown": false,  
          "deny_port_redirect": "",  
          "filter_port": "1-12"  
        },  
        "vlan": {  
          "tagged": "Any",  
          "filter": "Any",  
          "vid": 0,  
          "tag_priority": "Any"  
        },  
        "frame_type": "ipv4",  
        "ipv4": {  
          "dmac_filter": "Any",  
          "protocol_filter": "UDP",  
          "protocol_value": 1,  
          "ip_ttl": "Any",  
          "ip_fragment": "Any",  
          "ip_option": "Any",  
          "sip_filter": "Host",
```

```
        "sip": "192.168.1.3",
        "sip_mask": "255.255.255.255",
        "dip_filter": "Network",
        "dip": "192.168.1.4",
        "dip_mask": "255.255.255.0",
        "udp": {
            "sport_filter": 1,
            "sport_start": 10,
            "sport_end": 65535,
            "dport_filter": 2,
            "dport_start": 100,
            "dport_end": 65535
        }
    }
}
}
```

Frame_type : ipv4(TCP)

```
{
    "acl": {
        "add": [{
            "ipv4": {
                "ingress_port": "1-10",
                "policy": {
                    "filter": "Any",
                    "value": 0,
                    "bitmask": "7F"
                },
                "action": {
                    "mode": "Permit",
                    "rate_limiter": 0,
                    "mirror": false,
                    "logging": false,
                    "shutdown": false,
                    "deny_port_redirect": "",
                    "filter_port": "1-12"
                }
            },
        ]
    }
}
```

```
        "vlan": {
            "tagged": "Any",
            "filter": "Any",
            "vid": 0,
            "tag_priority": "Any"
        },
        "frame_type": "ipv4",
        "ipv4": {
            "dmac_filter": "Any",
            "protocol_filter": "TCP",
            "protocol_value": 1,
            "ip_ttl": "Any",
            "ip_fragment": "Any",
            "ip_option": "Any",
            "sip_filter": "Host",
            "sip": "192.168.1.3",
            "sip_mask": "255.255.255.255",
            "dip_filter": "Network",
            "dip": "192.168.1.4",
            "dip_mask": "255.255.255.0",
            "tcp": {
                "sport_filter": 1,
                "sport_start": 10,
                "sport_end": 65535,
                "dport_filter": 2,
                "dport_start": 100,
                "dport_end": 65535,
                "fin": 0,
                "syn": 1,
                "rst": 2,
                "psh": 2,
                "ack": 1,
                "urg": 0
            }
        }
    }
}
```

Frame_type : ipv4(Specific)

```
{
  "acl": {
    "add": [{
      "ipv4": {
        "ingress_port": "1-10",
        "policy": {
          "filter": "Any",
          "value": 0,
          "bitmask": "7F"
        },
        "action": {
          "mode": "Permit",
          "rate_limiter": 0,
          "mirror": false,
          "logging": false,
          "shutdown": false,
          "deny_port_redirect": "",
          "filter_port": "1-12"
        },
        "vlan": {
          "tagged": "Any",
          "filter": "Any",
          "vid": 0,
          "tag_priority": "Any"
        },
        "frame_type": "ipv4",
        "ipv4": {
          "dmac_filter": "Any",
          "protocol_filter": "Specific",
          "protocol_value": 55,
          "ip_ttl": "Any",
          "ip_fragment": "Any",
          "ip_option": "Any",
          "sip_filter": "Host",
          "sip": "192.168.1.3",
          "sip_mask": "255.255.255.255",
          "dip_filter": "Network",
          "dip": "192.168.1.4",
```

```

        "dip_mask": "255.255.255.0"
      }
    }
  }}
}

```

Frame_type : ipv6(Any)

```

{
  "acl": {
    "add": [{
      "ipv6": {
        "ingress_port": "1-8",
        "policy": {
          "filter": "Any",
          "value": "0",
          "bitmask": "7F"
        },
        "action": {
          "mode": "Filter",
          "rate_limiter": 0,
          "evc_policer": false,
          "evc_policer_id": 1,
          "mirror": false,
          "logging": false,
          "shutdown": false,
          "deny_port_redirect": "",
          "filter_port": "1-12"
        },
        "vlan": {
          "tagged": "Any",
          "filter": "Any",
          "vid": 0,
          "tag_priority": "5"
        },
        "frame_type": "ipv6",
        "ipv6": {
          "dmac_filter": "Any",
          "next_header_filter": "Any",

```

```

        "next_header_value": 1,
        "sip_filter": "Specific",
        "sip_address": "::",
        "sip_bitmask": "FFFFFFF2",
        "hop_limit": 1
      }
    }
  }
}

```

Frame_type : ipv6(ICMP)

```

{
  "acl": {
    "add": [{
      "ipv6": {
        "ingress_port": "1-8",
        "policy": {
          "filter": "Any",
          "value": "0",
          "bitmask": "7F"
        },
        "action": {
          "mode": "Filter",
          "rate_limiter": 0,
          "evc_policer": false,
          "evc_policer_id": 1,
          "mirror": false,
          "logging": false,
          "shutdown": false,
          "deny_port_redirect": "",
          "filter_port": "1-12"
        },
        "vlan": {
          "tagged": "Any",
          "filter": "Any",
          "vid": 0,
          "tag_priority": "5"
        }
      },

```

```

        "frame_type": "ipv6",
        "ipv6": {
            "dmac_filter": "Any",
            "next_header_filter": "Any",
            "next_header_value": 1,
            "sip_filter": "Specific",
            "sip_address": "::",
            "sip_bitmask": "FFFFFFF2",
            "hop_limit": 1
        }
    }
}

```

Frame_type : ipv6(UDP)

```

{
    "acl": {
        "add": [{
            "ipv6": {
                "ingress_port": "1-8",
                "policy": {
                    "filter": "Any",
                    "value": "0",
                    "bitmask": "7F"
                },
                "action": {
                    "mode": "Filter",
                    "rate_limiter": 0,
                    "evc_policer": false,
                    "evc_policer_id": 1,
                    "mirror": false,
                    "logging": false,
                    "shutdown": false,
                    "deny_port_redirect": "",
                    "filter_port": "1-12"
                },
                "vlan": {
                    "tagged": "Any",

```



```

        "filter": "Any",
        "vid": 0,
        "tag_priority": "5"
    },
    "frame_type": "ipv6",
    "ipv6": {
        "dmac_filter": "Any",
        "next_header_filter": "UDP",
        "next_header_value": 1,
        "sip_filter": "Specific",
        "sip_address": "::",
        "sip_bitmask": "FFFFFFF2",
        "hop_limit": 1,
        "udp": {
            "sport_filter": 1,
            "sport_start": 10,
            "sport_end": 65535,
            "dport_filter": 2,
            "dport_start": 100,
            "dport_end": 65535
        }
    }
}

```

Frame_type : ipv6(TCP)

```

{
    "acl": {
        "add": [{
            "ipv6": {
                "ingress_port": "1-8",
                "policy": {
                    "filter": "Any",
                    "value": "0",
                    "bitmask": "7F"
                },
                "action": {

```

```
        "mode": "Filter",
        "rate_limiter": 0,
        "evc_policer": false,
        "evc_policer_id": 1,
        "mirror": false,
        "logging": false,
        "shutdown": false,
        "deny_port_redirect": "",
        "filter_port": "1-12"
    },
    "vlan": {
        "tagged": "Any",
        "filter": "Any",
        "vid": 0,
        "tag_priority": "5"
    },
    "frame_type": "ipv6",
    "ipv6": {
        "dmac_filter": "Any",
        "next_header_filter": "TCP",
        "next_header_value": 1,
        "sip_filter": "Specific",
        "sip_address": "::",
        "sip_bitmask": "FFFFFFF2",
        "hop_limit": 1,
        "tcp": {
            "sport_filter": 1,
            "sport_start": 10,
            "sport_end": 65535,
            "dport_filter": 2,
            "dport_start": 100,
            "dport_end": 65535,
            "fin": 0,
            "syn": 1,
            "rst": 2,
            "psh": 2,
            "ack": 1,
            "urg": 0
        }
    }
}
```

```

    }
  }
}

```

Frame_type : ipv6(Specific)

```

{
  "acl": {
    "add": [{
      "ipv6": {
        "ingress_port": "1-8",
        "policy": {
          "filter": "Any",
          "value": "0",
          "bitmask": "7F"
        },
        "action": {
          "mode": "Filter",
          "rate_limiter": 0,
          "evc_policer": false,
          "evc_policer_id": 1,
          "mirror": false,
          "logging": false,
          "shutdown": false,
          "deny_port_redirect": "",
          "filter_port": "1-12"
        },
        "vlan": {
          "tagged": "Any",
          "filter": "Any",
          "vid": 0,
          "tag_priority": "5"
        },
        "frame_type": "ipv6",
        "ipv6": {
          "dmac_filter": "Any",
          "next_header_filter": "Specific",
          "next_header_value": 55,

```

```

        "sip_filter": "Specific",
        "sip_address": "::",
        "sip_bitmask": "FFFFFFF2",
        "hop_limit": 1
    }
}
}
}
}

```

Response JSON:**Frame_type : any**

```

{
  "acl": {
    "ace": [{
      "id": 1,
      "ingress_port": "1-5",
      "policy": {
        "filter": "Any",
        "value": 0,
        "bitmask": "FF"
      },
      "action": {
        "mode": "Permit",
        "rate_limiter": 0,
        "evc_policer": true,
        "evc_policer_id": 1,
        "mirror": false,
        "logging": true,
        "shutdown": false,
        "counter": 0,
        "deny_port_redirect": "0",
        "filter_port": "1-12"
      },
      "vlan": {
        "tagged": "Any",
        "filter": "Any",
        "id": 0,
        "tag_priority": "Any"
      }
    }],
  }
}

```

```
    },
    "frame_type": "any"
  }}
}
```

Frame_type : ethernet

```
{
  "acl": {
    "ace": [{
      "id": 1,
      "ingress_port": "1-5",
      "policy": {
        "filter": "Any",
        "value": 0,
        "bitmask": "FF"
      },
      "action": {
        "mode": "Filter",
        "rate_limiter": 0,
        "evc_policer": false,
        "evc_policer_id": 1,
        "mirror": true,
        "logging": true,
        "shutdown": false,
        "counter": 0,
        "deny_port_redirect": "0",
        "filter_port": "9-10"
      },
      "vlan": {
        "tagged": "Any",
        "filter": "Specific",
        "id": 20,
        "tag_priority": "Any"
      },
      "frame_type": "ethernet",
      "ethernet": {
        "smac_filter": "Specific",
```

```
        "smac": "00-00-00-00-00-01",
        "smac_mask": "0",
        "dmac_filter": "Specific",
        "dmac": "00-00-00-00-00-02",
        "dmac_mask": "0",
        "ether_type_filter": "Any",
        "ether_type": "0"
    }
}
}
```

Frame_type : arp

```
{
  "acl": {
    "ace": [{
      "id": 1,
      "ingress_port": "1-4",
      "policy": {
        "filter": "Any",
        "value": 0,
        "bitmask": "FF"
      },
      "action": {
        "mode": "Permit",
        "rate_limiter": 0,
        "evc_policer": false,
        "evc_policer_id": 1,
        "mirror": false,
        "logging": false,
        "shutdown": false,
        "counter": 0,
        "deny_port_redirect": "0",
        "filter_port": "1-12"
      },
      "vlan": {
        "tagged": "Any",
        "filter": "Any",
        "id": 0,
```

```

        "tag_priority": "Any"
    },
    "frame_type": "arp",
    "arp": {
        "smac_filter": "Any",
        "smac": "00-00-00-00-00-01",
        "dmac_filter": "Any",
        "parameters": {
            "type": "ARP",
            "op": "Any",
            "sender": {
                "filter": "Host",
                "address": "0.0.0.0",
                "mask": "255.255.255.255"
            },
            "target": {
                "filter": "Network",
                "address": "0.0.0.0",
                "mask": "255.255.255.0"
            }
        },
        "arp_smac_match": "Any",
        "rarp_dmac_match": "Any",
        "arp_ip_eth_len": "Any",
        "arp_ip": "Any",
        "arp_eth": "Any"
    }
}

```

Frame_type : ipv4(Any)

```

{
    "acl": {
        "ace": [{
            "id": 1,
            "ingress_port": "1-8",
            "policy": {
                "filter": "Any",

```

```
        "value": 0,
        "bitmask": "FF"
    },
    "action": {
        "mode": "Filter",
        "rate_limiter": 0,
        "evc_policer": false,
        "evc_policer_id": 1,
        "mirror": false,
        "logging": false,
        "shutdown": false,
        "counter": 0,
        "deny_port_redirect": "0",
        "filter_port": "1-12"
    },
    "vlan": {
        "tagged": "Any",
        "filter": "Any",
        "id": 0,
        "tag_priority": "5"
    },
    "frame_type": "ipv4",
    "ipv4": {
        "dmac_filter": "Any",
        "protocol_filter": "Any",
        "protocol_value": 0,
        "ip_ttl": "Zero",
        "ip_fragment": "Yes",
        "ip_option": "No",
        "sip_filter": "Any",
        "sip_address": "0.0.0.0",
        "sip_mask": "0.0.0.0",
        "dip_filter": "Any",
        "dip_address": "0.0.0.0",
        "dip_mask": "0.0.0.0",
        "icmp": {
            "type_filter": 0,
            "type_value": 0,
            "code_filter": 0,
```



```
        "code_value": 0
      },
      "udp": {
        "sport_filter": 0,
        "sport_start": 0,
        "sport_end": 0,
        "dport_filter": 0,
        "dport_start": 0,
        "dport_end": 0
      },
      "tcp": {
        "sport_filter": 0,
        "sport_start": 0,
        "sport_end": 0,
        "dport_filter": 0,
        "dport_start": 0,
        "dport_end": 0,
        "fin": 0,
        "syn": 0,
        "rst": 0,
        "psh": 0,
        "ack": 0,
        "urg": 0
      }
    }
  }
}
```

Frame_type : ipv4(ICMP)

```
{
  "acl": {
    "ace": [{
      "id": 1,
      "ingress_port": "1-10",
      "policy": {
        "filter": "Any",
        "value": 0,
        "bitmask": "FF"
      }
    }]
  }
}
```

```
},
"action": {
  "mode": "Permit",
  "rate_limiter": 0,
  "evc_policer": false,
  "evc_policer_id": 1,
  "mirror": false,
  "logging": false,
  "shutdown": false,
  "counter": 0,
  "deny_port_redirect": "0",
  "filter_port": "1-12"
},
"vlan": {
  "tagged": "Any",
  "filter": "Any",
  "id": 0,
  "tag_priority": "Any"
},
"frame_type": "ipv4",
"ipv4": {
  "dmac_filter": "Any",
  "protocol_filter": "ICMP",
  "protocol_value": 2,
  "ip_ttl": "Any",
  "ip_fragment": "Any",
  "ip_option": "Any",
  "sip_filter": "Host",
  "sip_address": "192.168.1.3",
  "sip_mask": "255.255.255.255",
  "dip_filter": "Host",
  "dip_address": "192.168.1.4",
  "dip_mask": "255.255.255.255",
  "icmp": {
    "type_filter": 0,
    "type_value": 0,
    "code_filter": 1,
    "code_value": 2
  }
},
```

```
        "udp": {
            "sport_filter": 0,
            "sport_start": 0,
            "sport_end": 0,
            "dport_filter": 0,
            "dport_start": 0,
            "dport_end": 0
        },
        "tcp": {
            "sport_filter": 0,
            "sport_start": 0,
            "sport_end": 0,
            "dport_filter": 0,
            "dport_start": 0,
            "dport_end": 0,
            "fin": 0,
            "syn": 0,
            "rst": 0,
            "psh": 0,
            "ack": 0,
            "urg": 0
        }
    }
}
}
```

Frame_type : ipv4(UDP)

```
{
    "acl": {
        "ace": [{
            "id": 1,
            "ingress_port": "1-10",
            "policy": {
                "filter": "Any",
                "value": 0,
                "bitmask": "FF"
            },
            "action": {
```

```
    "mode": "Permit",
    "rate_limiter": 0,
    "evc_policer": false,
    "evc_policer_id": 1,
    "mirror": false,
    "logging": false,
    "shutdown": false,
    "counter": 0,
    "deny_port_redirect": "0",
    "filter_port": "1-12"
  },
  "vlan": {
    "tagged": "Any",
    "filter": "Any",
    "id": 0,
    "tag_priority": "Any"
  },
  "frame_type": "ipv4",
  "ipv4": {
    "dmac_filter": "Any",
    "protocol_filter": "UDP",
    "protocol_value": 2,
    "ip_ttl": "Any",
    "ip_fragment": "Any",
    "ip_option": "Any",
    "sip_filter": "Host",
    "sip_address": "192.168.1.3",
    "sip_mask": "255.255.255.255",
    "dip_filter": "Network",
    "dip_address": "192.168.1.4",
    "dip_mask": "255.255.255.0",
    "icmp": {
      "type_filter": 0,
      "type_value": 0,
      "code_filter": 0,
      "code_value": 0
    },
    "udp": {
      "sport_filter": 1,
```

```

        "sport_start": 10,
        "sport_end": 10,
        "dport_filter": 2,
        "dport_start": 100,
        "dport_end": 65535
    },
    "tcp": {
        "sport_filter": 0,
        "sport_start": 0,
        "sport_end": 0,
        "dport_filter": 0,
        "dport_start": 0,
        "dport_end": 0,
        "fin": 0,
        "syn": 0,
        "rst": 0,
        "psh": 0,
        "ack": 0,
        "urg": 0
    }
}
}
}
}
}
}
}

```

Frame_type : ipv4(TCP)

```

{
    "acl": {
        "ace": [{
            "id": 1,
            "ingress_port": "1-10",
            "policy": {
                "filter": "Any",
                "value": 0,
                "bitmask": "FF"
            },
            "action": {
                "mode": "Permit",
                "rate_limiter": 0,

```

```
        "evc_policer": false,
        "evc_policer_id": 1,
        "mirror": false,
        "logging": false,
        "shutdown": false,
        "counter": 0,
        "deny_port_redirect": "0",
        "filter_port": "1-12"
    },
    "vlan": {
        "tagged": "Any",
        "filter": "Any",
        "id": 0,
        "tag_priority": "Any"
    },
    "frame_type": "ipv4",
    "ipv4": {
        "dmac_filter": "Any",
        "protocol_filter": "TCP",
        "protocol_value": 2,
        "ip_ttl": "Any",
        "ip_fragment": "Any",
        "ip_option": "Any",
        "sip_filter": "Host",
        "sip_address": "192.168.1.3",
        "sip_mask": "255.255.255.255",
        "dip_filter": "Network",
        "dip_address": "192.168.1.4",
        "dip_mask": "255.255.255.0",
        "icmp": {
            "type_filter": 0,
            "type_value": 0,
            "code_filter": 0,
            "code_value": 0
        }
    },
    "udp": {
        "sport_filter": 0,
        "sport_start": 0,
        "sport_end": 0,
```

```
        "dport_filter": 0,
        "dport_start": 0,
        "dport_end": 0
    },
    "tcp": {
        "sport_filter": 1,
        "sport_start": 10,
        "sport_end": 10,
        "dport_filter": 2,
        "dport_start": 100,
        "dport_end": 65535,
        "fin": 0,
        "syn": 1,
        "rst": 2,
        "psh": 2,
        "ack": 1,
        "urg": 0
    }
}
}
```

Frame_type : ipv4(Specific)

```
{
  "acl": {
    "ace": [{
      "id": 1,
      "ingress_port": "1-10",
      "policy": {
        "filter": "Any",
        "value": 0,
        "bitmask": "FF"
      },
      "action": {
        "mode": "Permit",
        "rate_limiter": 0,
        "evc_policer": false,
        "evc_policer_id": 1,

```

```
        "mirror": false,
        "logging": false,
        "shutdown": false,
        "counter": 0,
        "deny_port_redirect": "0",
        "filter_port": "1-12"
    },
    "vlan": {
        "tagged": "Any",
        "filter": "Any",
        "id": 0,
        "tag_priority": "Any"
    },
    "frame_type": "ipv4",
    "ipv4": {
        "dmac_filter": "Any",
        "protocol_filter": "Specific",
        "protocol_value": 55,,
        "ip_ttl": "Any",
        "ip_fragment": "Any",
        "ip_option": "Any",
        "sip_filter": "Host",
        "sip_address": "192.168.1.3",
        "sip_mask": "255.255.255.255",
        "dip_filter": "Network",
        "dip_address": "192.168.1.4",
        "dip_mask": "255.255.255.0",
        "icmp": {
            "type_filter": 0,
            "type_value": 0,
            "code_filter": 0,
            "code_value": 0
        },
        "udp": {
            "sport_filter": 0,
            "sport_start": 0,
            "sport_end": 0,
            "dport_filter": 0,
            "dport_start": 0,
```



```
        "dport_end": 0
      },
      "tcp": {
        "sport_filter": 0,
        "sport_start": 0,
        "sport_end": 0,
        "dport_filter": 0,
        "dport_start": 0,
        "dport_end": 0,
        "fin": 0,
        "syn": 0,
        "rst": 0,
        "psh": 0,
        "ack": 0,
        "urg": 0
      }
    }
  }
}
```

Frame_type : ipv6(Any)

```
{
  "acl": {
    "ace": [{
      "id": 1,
      "ingress_port": "1-8",
      "policy": {
        "filter": "Any",
        "value": 0,
        "bitmask": "FF"
      },
      "action": {
        "mode": "Filter",
        "rate_limiter": 0,
        "evc_policer": false,
        "evc_policer_id": 1,
        "mirror": false,
        "logging": false,

```

```
        "shutdown": false,
        "counter": 0,
        "deny_port_redirect": "0",
        "filter_port": "1-12"
    },
    "vlan": {
        "tagged": "Any",
        "filter": "Any",
        "id": 0,
        "tag_priority": "5"
    },
    "frame_type": "ipv6",
    "ipv6": {
        "dmac_filter": "Any",
        "next_header_filter": "Any",
        "next_header_value": 0,
        "sip_filter": "Specific",
        "sip_address": "::",
        "sip_bitmask": "FFFFFFF2",
        "hop_limit": "1",
        "icmp": {
            "type_filter": 0,
            "type_value": 0,
            "code_filter": 0,
            "code_value": 0
        },
        "udp": {
            "sport_filter": 0,
            "sport_start": 0,
            "sport_end": 0,
            "dport_filter": 0,
            "dport_start": 0,
            "dport_end": 0
        },
        "tcp": {
            "sport_filter": 0,
            "sport_start": 0,
            "sport_end": 0,
            "dport_filter": 0,
```

```
        "dport_start": 0,  
        "dport_end": 0,  
        "fin": 0,  
        "syn": 0,  
        "rst": 0,  
        "psh": 0,  
        "ack": 0,  
        "urg": 0  
    }  
}  
}  
}
```

Frame_type : ipv6(ICMP)

```
{
  "acl": {
    "ace": [{
      "id": 1,
      "ingress_port": "1-8",
      "policy": {
        "filter": "Any",
        "value": 0,
        "bitmask": "FF"
      },
      "action": {
        "mode": "Filter",
        "rate_limiter": 0,
        "evc_policer": false,
        "evc_policer_id": 1,
        "mirror": false,
        "logging": false,
        "shutdown": false,
        "counter": 0,
        "deny_port_redirect": "0",
        "filter_port": "1-12"
      },
      "vlan": {
        "tagged": "Any",
        "filter": "Any",
        "id": 0,
        "tag_priority": "5"
      },
      "frame_type": "ipv6",
      "ipv6": {
        "dmac_filter": "Any",
        "next_header_filter": "ICMP",
        "next_header_value": 58,
        "sip_filter": "Specific",
        "sip_address": "::",
        "sip_bitmask": "FFFFFFF2",
        "hop_limit": "1",
        "icmp": {
```

```
        "type_filter": 1,  
        "type_value": 1,  
        "code_filter": 1,  
        "code_value": 2  
    },  
    "udp": {  
        "sport_filter": 0,  
        "sport_start": 0,  
        "sport_end": 0,  
        "dport_filter": 0,  
        "dport_start": 0,  
        "dport_end": 0  
    },  
    "tcp": {  
        "sport_filter": 0,  
        "sport_start": 0,  
        "sport_end": 0,  
        "dport_filter": 0,  
        "dport_start": 0,  
        "dport_end": 0,  
        "fin": 0,  
        "syn": 0,  
        "rst": 0,  
        "psh": 0,  
        "ack": 0,  
        "urg": 0  
    }  
}  
}  
}  
}
```

Frame_type : ipv6(UDP)

```
{
  "acl": {
    "ace": [{
      "id": 1,
      "ingress_port": "1-8",
      "policy": {
        "filter": "Any",
        "value": 0,
        "bitmask": "FF"
      },
      "action": {
        "mode": "Filter",
        "rate_limiter": 0,
        "evc_policer": false,
        "evc_policer_id": 1,
        "mirror": false,
        "logging": false,
        "shutdown": false,
        "counter": 0,
        "deny_port_redirect": "0",
        "filter_port": "1-12"
      },
      "vlan": {
        "tagged": "Any",
        "filter": "Any",
        "id": 0,
        "tag_priority": "5"
      },
      "frame_type": "ipv6",
      "ipv6": {
        "dmac_filter": "Any",
        "next_header_filter": "UDP",
        "next_header_value": 17,
        "sip_filter": "Specific",
        "sip_address": "::",
        "sip_bitmask": "FFFFFFF2",
        "hop_limit": "1",
        "icmp": {
```

```
        "type_filter": 0,  
        "type_value": 0,  
        "code_filter": 0,  
        "code_value": 0  
    },  
    "udp": {  
        "sport_filter": 1,  
        "sport_start": 10,  
        "sport_end": 10,  
        "dport_filter": 2,  
        "dport_start": 100,  
        "dport_end": 65535  
    },  
    "tcp": {  
        "sport_filter": 0,  
        "sport_start": 0,  
        "sport_end": 0,  
        "dport_filter": 0,  
        "dport_start": 0,  
        "dport_end": 0,  
        "fin": 0,  
        "syn": 0,  
        "rst": 0,  
        "psh": 0,  
        "ack": 0,  
        "urg": 0  
    }  
}  
}  
}]  
}
```

Frame_type : ipv6(TCP)

```

{
  "acl": {
    "ace": [{
      "id": 1,
      "ingress_port": "1-8",
      "policy": {
        "filter": "Any",
        "value": 0,
        "bitmask": "FF"
      },
      "action": {
        "mode": "Filter",
        "rate_limiter": 0,
        "evc_policer": false,
        "evc_policer_id": 1,
        "mirror": false,
        "logging": false,
        "shutdown": false,
        "counter": 0,
        "deny_port_redirect": "0",
        "filter_port": "1-12"
      },
      "vlan": {
        "tagged": "Any",
        "filter": "Any",
        "id": 0,
        "tag_priority": "5"
      },
      "frame_type": "ipv6",
      "ipv6": {
        "dmac_filter": "Any",
        "next_header_filter": "TCP",
        "next_header_value": 6,
        "sip_filter": "Specific",
        "sip_address": "::",
        "sip_bitmask": "FFFFFFF2",
        "hop_limit": "1",
        "icmp": {

```



```
        "type_filter": 0,  
        "type_value": 0,  
        "code_filter": 0,  
        "code_value": 0  
    },  
    "udp": {  
        "sport_filter": 0,  
        "sport_start": 0,  
        "sport_end": 0,  
        "dport_filter": 0,  
        "dport_start": 0,  
        "dport_end": 0  
    },  
    "tcp": {  
        "sport_filter": 1,  
        "sport_start": 10,  
        "sport_end": 10,  
        "dport_filter": 2,  
        "dport_start": 100,  
        "dport_end": 65535,  
        "fin": 0,  
        "syn": 1,  
        "rst": 2,  
        "psh": 2,  
        "ack": 1,  
        "urg": 0  
    }  
}  
}  
}]  
}
```

Frame_type : ipv6(Specific)

```

{
  "acl": {
    "ace": [{
      "id": 1,
      "ingress_port": "1-8",
      "policy": {
        "filter": "Any",
        "value": 0,
        "bitmask": "FF"
      },
      "action": {
        "mode": "Filter",
        "rate_limiter": 0,
        "evc_policer": false,
        "evc_policer_id": 1,
        "mirror": false,
        "logging": false,
        "shutdown": false,
        "counter": 0,
        "deny_port_redirect": "0",
        "filter_port": "1-12"
      },
      "vlan": {
        "tagged": "Any",
        "filter": "Any",
        "id": 0,
        "tag_priority": "5"
      },
      "frame_type": "ipv6",
      "ipv6": {
        "dmac_filter": "Any",
        "next_header_filter": "Specific",
        "next_header_value": 55,
        "sip_filter": "Specific",
        "sip_address": "::",
        "sip_bitmask": "FFFFFFF2",
        "hop_limit": "1",
        "icmp": {

```

```
        "type_filter": 0,  
        "type_value": 0,  
        "code_filter": 0,  
        "code_value": 0  
    },  
    "udp": {  
        "sport_filter": 0,  
        "sport_start": 0,  
        "sport_end": 0,  
        "dport_filter": 0,  
        "dport_start": 0,  
        "dport_end": 0  
    },  
    "tcp": {  
        "sport_filter": 0,  
        "sport_start": 0,  
        "sport_end": 0,  
        "dport_filter": 0,  
        "dport_start": 0,  
        "dport_end": 0,  
        "fin": 0,  
        "syn": 0,  
        "rst": 0,  
        "psh": 0,  
        "ack": 0,  
        "urg": 0  
    }  
}  
  
}}  
  
}
```

Section:

Name	Data type	Allowed / Value	Default Value
id	Integer	1-256	
ingress_port	String	Port Ranges. "1,3,10" or "0": all ports	0
frame_type	String	"any" 、 "ethernet" 、 "arp" 、 "ipv4" 、 "ipv6"	any
policy->filter	String	"Any" 、 "Specific"	Any

policy->value	Integer	0-255	0
policy->bitmask	String	0-FF	FF
action->mode	String	"Deny" 、 "Permit" 、 "Filter"	Permit
action->rate_limiter	Integer	1-16 or 0:Disabled	0
action->evc_policer	Boolean		false
action->evc_policer_id	Integer	1-256	1
action->mirror	Boolean		false
action->logging	Boolean		false
action->shutdown	Boolean		false
action->counter	Integer		
action->deny_port_redirect	String	deny mode used only. "1,3,10" or "0": all ports	0
action->filter_port	String	filter mode used only. "1,3,10" or "0": all ports	0
vlan->tagged	String	"Any" 、 "Disabled" 、 "Enabled"	Any
vlan->vid_filter	String	"Any" 、 "Specific"	Any
vlan->vid	Integer	1-4095	1
vlan->tag_priority	String	"0" 、 "1" 、 "2" 、 "3" 、 "4" 、 "5" 、 "6" 、 "7" 、 "0-1" 、 "2-3" 、 "4-5" 、 "6-7" 、 "0-3" 、 "4-7" 、 "Any"	Any
ethernet->smac_filter	String	"Any" 、 "Specific"	Any
ethernet->smac	String	<mac address>	
ethernet->dmac_filter	String	"Any" 、 "Specific" 、 "MC" 、 "BC" 、 "UC"	Any
ethernet->dmac	String	<mac address>	
ethernet->ether_type_filter	String	"Any" 、 "Specific"	Any
ethernet->ether_type	String	0000-FFFF	FFFF
arp->smac_filter	String	"Any" 、 "Specific"	Any
arp->smac	String	<mac address>	
arp->dmac_filter	String	"Any" 、 "MC" 、 "BC" 、 "UC"	Any
parameters->type	String	"Any" 、 "ARP" 、 "RARP" 、 "Other"	Any
parameters->op	String	"Any" 、 "Reply" 、 "Request"	Any
sender->filter	String	"Any" 、 "Host" 、 "Network"	Any
sender->address	String	<ip address>	
sender->mask	String	<ip address>	
target->filter	String	"Any" 、 "Host" 、 "Network"	Any
target->address	String	<ip address>	

target->mask	String	<ip address>	
arp->arp_smac_match	String	"Any" 、 "0" 、 "1"	Any
arp->arp_dmac_match	String	"Any" 、 "0" 、 "1"	Any
arp->arp_ip_eth_len	String	"Any" 、 "0" 、 "1"	Any
arp->arp_ip	String	"Any" 、 "0" 、 "1"	Any
arp->arp_eth	String	"Any" 、 "0" 、 "1"	Any
ipv4->dmac_filter	String	"Any" 、 "MC" 、 "BC" 、 "UC"	Any
ipv4->protocol_filter	String	"Any" 、 "ICMP" 、 "UDP" 、 "TCP" 、 "Specific"	Any
ipv4->ip_ttl	String	"Any" 、 "Non-zero" 、 "Zero"	Any
ipv4->ip_fragment	String	"Any" 、 "Yes" 、 "No"	Any
ipv4->ip_option	String	"Any" 、 "Yes" 、 "No"	Any
ipv4->sip_filter	String	"Any" 、 "Host" 、 "Network"	Any
ipv4->sip	String	<ip address>	
ipv4->sip_mask	String	<ip address>	
ipv4->dip_filter	String	"Any" 、 "Host" 、 "Network"	Any
ipv4->dip	String	<ip address>	
ipv4->dip_mask	String	<ip address>	
ipv4->icmp->type_filter	Integer	0:"Any" 、 1:"Specific"	0
ipv4->icmp->type_value	Integer	0-255	0
ipv4->icmp->code_filter	Integer	0:"Any" 、 1:"Specific"	0
ipv4->icmp->code_value	Integer	0-255	0
ipv4->udp->sport_filter	Integer	0:"Any" 、 1:"Specific" 、 2:"Range"	0
ipv4->udp->sport_start	Integer	0-65535	0
ipv4->udp->sport_end	Integer	0-65535	65535
ipv4->udp->dport_filter	Integer	0:"Any" 、 1:"Specific" 、 2:"Range"	0
ipv4->udp->dport_start	Integer	0-65535	0
ipv4->udp->dport_end	Integer	0-65535	65535
ipv4->tcp->sport_filter	Integer	0:"Any" 、 1:"Specific" 、 2:"Range"	0
ipv4-> tcp->sport_start	Integer	0-65535	0
ipv4-> tcp->sport_end	Integer	0-65535	65535
ipv4-> tcp->dport_filter	Integer	0:"Any" 、 1:"Specific" 、 2:"Range"	0
ipv4-> tcp->dport_start	Integer	0-65535	0
ipv4-> tcp->dport_end	Integer	0-65535	65535
ipv4->tcp->fin	Integer	2:"Any" 、 1 、 0	2
ipv4->tcp->syn	Integer	2:"Any" 、 1 、 0	2
ipv4->tcp->rst	Integer	2:"Any" 、 1 、 0	2

ipv4->tcp->psh	Integer	2:"Any"、1、0	2
ipv4->tcp->ack	Integer	2:"Any"、1、0	2
ipv4->tcp->urg	Integer	2:"Any"、1、0	2
ipv4->protocol_value	Integer	0-255	
ipv6->dmac_filter	String	"Any"、"MC"、"BC"、"UC"	Any
ipv6->next_header_filter	String	"Any"、"ICMP"、"UDP"、 "TCP"、"Specific"	Any
ipv6->sip_filter	String	"Any"、"Specific"	Any
ipv6->sip_address	String	<ipv6 address>	::
ipv6->sip_bitmask	String	0-FFFFFFFF	FFFFFFFF
ipv6->hop_limit	String	"Any"、"1"、"0"	Any
ipv6->icmp->type_filter	Integer	0:"Any"、1:"Specific"	0
ipv6->icmp->type_value	Integer	0-255	0
ipv6->icmp->code_filter	Integer	0:"Any"、1:"Specific"	0
ipv6->icmp->code_value	Integer	0-255	0
ipv6->udp->sport_filter	Integer	0:"Any"、1:"Specific"、2:"Range"	0
ipv6->udp->sport_start	Integer	0-65535	0
ipv6->udp->sport_end	Integer	0-65535	65535
ipv6->udp->dport_filter	Integer	0:"Any"、1:"Specific"、2:"Range"	0
ipv6->udp->dport_start	Integer	0-65535	0
ipv6->udp->dport_end	Integer	0-65535	65535
ipv6->tcp->sport_filter	Integer	0:"Any"、1:"Specific"、2:"Range"	0
ipv6-> tcp->sport_start	Integer	0-65535	0
ipv6-> tcp->sport_end	Integer	0-65535	65535
ipv6-> tcp->dport_filter	Integer	0:"Any"、1:"Specific"、2:"Range"	0
ipv6-> tcp->dport_start	Integer	0-65535	0
ipv6-> tcp->dport_end	Integer	0-65535	65535
ipv6->tcp->fin	Integer	2:"Any"、1、0	2
ipv6->tcp->syn	Integer	2:"Any"、1、0	2
ipv6->tcp->rst	Integer	2:"Any"、1、0	2
ipv6->tcp->psh	Integer	2:"Any"、1、0	2
ipv6->tcp->ack	Integer	2:"Any"、1、0	2
ipv6->tcp->urg	Integer	2:"Any"、1、0	2
ipv6->next_header_value	Integer	0-255	

32. Delete ACL Config

URL: /api/del_acl_config

Method: POST

Request JSON:

```
{
  "acl": {
    "delete": [{
      "id": 1
    }, {
      "id": 3
    }]
  }
}
```

Response JSON:

```
{
  "acl": {
    "ace": [{
      "id": 2,
      "ingress_port": "2",
      "policy": {
        "filter": "Any",
        "value": 0,
        "bitmask": "FF"
      },
      "action": {
        "mode": "Permit",
        "rate_limiter": 0,
        "evc_policer": false,
        "evc_policer_id": 1,
        "mirror": false,
        "logging": false,
        "shutdown": false,
        "counter": 0,
        "deny_port_redirect": "0",
        "filter_port": "1-12"
      },
      "vlan": {
        "tagged": "Any",
```

```
        "filter": "Any",  
        "id": 0,  
        "tag_priority": "Any"  
    },  
    "frame_type": "any"  
}  
}
```


cURL Commands v 1.0

```

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

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_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_acl_config

curl -v --cookie "seid=123456789" -d '{"acl\":"add\":[{"any\":"ingress_port\":"1-5\","policy\":"filter\":"Any\","value\":"0,\\"bitmask\":"FF\","action\":"mode\":"Permit\","rate_limiter\":"0,\\"evc_policer\":"true,\\"evc_policer_id\":"1,\\"mirror\":"false,\\"logging\":"true,\\"shutdown\":"false,\\"deny_port_redirect\":"0\","filter_port\":"1-12\","vlan\":"tagged\":"Any\","filter\":"Any\","vid\":"0,\\"tag_priority\":"Any\","frame_type\":"any"}]}'
http://192.168.1.77/api/add_acl_config

curl -v --cookie "seid=123456789" -d '{"acl\":"delete\":[{"id\":"4"}]}'
{ http://192.168.1.77/api/del_acl_config

```

Record of Revisions

Rev.	Date	Description
A	3/4/21	Initial release for SM24DP4XA at FW v7.20.0042.

Note: Minimum version of firmware required: v7.20.0042.