

## Authentication

Description: We need authentication token from LiveNX Server for all requests made to Server. The below API will return the bearer token.

<b>POST</b>	https://<server-uri>:8093/v1/oauth/token
-------------	------------------------------------------

### Payload - Body (Sample)\*

Username	<user>
Password	<password>
grant_type	Password
client_id	<client-id>
client_secret	<client-secret>

\* Refer API docs for list of parameters

### Headers

Content-Type	application/x-www-form-urlencoded
--------------	-----------------------------------

### Output - JSON (Sample)

```
{
  "access_token": "205d1ec9f6f5179d53955d3b6920824c",
  "refresh_token": "7319dfbb1cdf5f1323baef3892d66631",
  "token_type": "bearer",
  "expires_in": 9223372036854775
}
```

### Code Sample

We have used **172.31.1.200** as our LiveNX IP, **admin** as Username and **abcdef** as Password

## cURL

```
curl -X POST \
  https:// 172.31.1.200:8093/v1/oauth/token \
  -H 'cache-control: no-cache' \
  -H 'content-type: application/x-www-form-urlencoded' \
  -d
'username=admin&password=abcdef&grant_type=password&client_id=liveaction&client_secret=secret'
```

## NodeJS

```
var unirest = require("unirest");

var req = unirest("POST", "https://172.31.1.200:8093/v1/oauth/token");

req.headers({
  "cache-control": "no-cache",
  "content-type": "application/x-www-form-urlencoded"
});

req.form({
  "username": "admin",
  "password": "abcdef",
  "grant_type": "password",
  "client_id": "liveaction",
  "client_secret": "secret"
});

req.end(function (res) {
  if (res.error) throw new Error(res.error);

  console.log(res.body);
});
```

## GO

```
package main

import (
    "fmt"
    "strings"
    "net/http"
```

```

        "io/ioutil"
    )

    func main() {

        url := "https://172.31.1.200:8093/v1/oauth/token"

        payload :=
strings.NewReader("username=admin&password=abcdef&grant_type=password&client
_id=liveaction&client_secret=secret")

        req, _ := http.NewRequest("POST", url, payload)

        req.Header.Add("content-type", "application/x-www-form-urlencoded")
        req.Header.Add("cache-control", "no-cache")

        res, _ := http.DefaultClient.Do(req)

        defer res.Body.Close()
        body, _ := ioutil.ReadAll(res.Body)

        fmt.Println(res)
        fmt.Println(string(body))

    }

```

## Java

```

HttpResponse<String> response = Unirest.post("https://
172.31.1.200:8093/v1/oauth/token")
    .header("content-type", "application/x-www-form-urlencoded")
    .header("cache-control", "no-cache") .body("username=
admin&password=abcdef&grant_type=password&client_id=liveaction&client_secret=sec
ret")
    .asString();

```

## Python

```

import requests

url = "https:// 172.31.1.200:8093/v1/oauth/token"

```

```

payload =
"username=admin&password=abcdef&grant_type=password&client_id=liveaction&client_secret=secret"
headers = {
    'content-type': 'application/x-www-form-urlencoded',
    'cache-control': 'no-cache',
    'postman-token': '2deae296-da4b-0926-dd47-cada547c40c8'
}

response = requests.request("POST", url, data=payload, headers=headers)

print(response.text)

```

## Advanced Reports

Description: We can run Flow/QoS reports. We need to get the bearer token and list of required parameters to an API

**POST** <https://<server-uri>:8093/v1/reports/queue>

### Payload – JSON (Sample)\*

```

{
  "name": "Test-Report",
  "reports": [
    {
      "reportId": {
        "category": "flow",
        "id": "8"
      },
      "parameters": {
        "startTime": 1493735082737,
        "endTime": 1493735982737,
        "deviceSerial": "ALL_DEVICES_SERIAL",
        "interface": "All Interfaces",
        "displayFilter": "No Display Filtering",
        "direction": "outbound",
        "flowType": "basic",
        "executionType": "timeseries",
        "sortBy": "BIT_RATE",

```

```

    "flexSearch": "",
    "businessHours": "none",
    "binDuration": "auto"
  }
},
{
  "reportId": {
    "category": "qos",
    "id": "16"
  },
  "parameters": {
    "startTime": 1493735081122,
    "direction": "combined",
    "endTime": 1493735981122,
    "executionType": "aggregation",
    "flexSearch": ""
  }
}
],
"timeZone": {
  "id": "Asia/Calcutta",
  "enableDst": false
},
"sharingConfig": [
]
]
}

```

\* Refer API docs for list of parameters. Here two reports are combined in a single report (Advanced Report)

## Headers

Content-Type	application/json
Authorization	Bearer 205d1ec9f6f5179d53955d3b6920824c

## Output – JSON (Sample)

```

{
  "meta": {
    "href": "https://<server-uri>:8093/v1/reports/queue",
    "http": {

```

```

    "method": "POST",
    "statusCode": 200,
    "statusReason": "OK"
  }
},
"jobId": "044381da-3832-430e-90de-8a0fefe6ec45",
"request": {
  "name": "Application",
  "sharingConfig": [],
  "reports": [
    {
      "reportId": {
        "category": "flow",
        "id": "8"
      },
      "parameters": {
        "startTime": 1493735082737,
        "endTime": 1493735982737,
        "deviceSerial": "ALL_DEVICES_SERIAL",
        "interface": "All Interfaces",
        "displayFilter": "No Display Filtering",
        "direction": "outbound",
        "flowType": "basic",
        "executionType": "timeseries",
        "sortBy": "BIT_RATE",
        "flexSearch": "",
        "businessHours": "none",
        "binDuration": "auto"
      }
    },
    {
      "reportId": {
        "category": "qos",
        "id": "16"
      },
      "parameters": {
        "startTime": 1493735081122,
        "direction": "combined",
        "endTime": 1493735981122,
        "executionType": "aggregation",
        "flexSearch": ""
      }
    }
  ]
}

```

```

    ],
    "resultsUrl": null,
    "callback": null,
    "timeZone": {
      "id": "Asia/Calcutta",
      "enableDst": false
    },
    "useFastLane": null
  },
  "jobInfo": {
    "name": "Application",
    "reports": [
      {
        "reportInfo": {
          "id": "8",
          "reportCategory": "flow",
          "reportBase": "COMBINED_APPLICATION",
          "name": "Application",
          "group": "Applications",
          "isSavedReport": false,
          "allowsAllDevices": true,
          "allowsAllInterfaces": true,
          "availableParameters": [
            {
              "queryKey": "startTime",
              "parameterType": "StartDateParameter"
            },
            {
              "queryKey": "endTime",
              "parameterType": "EndDateParameter"
            },
            {
              "queryKey": "deviceSerial",
              "parameterType": "DeviceSerialParameter",
              "defaultValue": {
                "apiValue": "ALL_DEVICES_SERIAL",
                "displayValue": null
              }
            }
          ],
          "queryKey": "interface",
          "parameterType": "DeviceInterfaceParameter",
          "defaultValue": {

```

```

    "apiValue": "All Interfaces",
    "displayValue": "All Interfaces"
  }
},
{
  "queryKey": "displayFilter",
  "parameterType": "DisplayFilterParameter",
  "defaultValue": {
    "apiValue": "No Display Filtering",
    "displayValue": "No Display Filtering"
  },
  "availableValues": [
    {
      "apiValue": "No Display Filtering",
      "displayValue": "No Display Filtering"
    },
    {
      "apiValue": "[ad hoc filter]",
      "displayValue": "[ad hoc filter]"
    },
    {
      "apiValue": "*DefaultFilterGroup",
      "displayValue": "*DefaultFilterGroup"
    },
    {
      "apiValue": "*Hide-SD-WAN-Control",
      "displayValue": "*Hide-SD-WAN-Control"
    },
    {
      "apiValue": "CPOF",
      "displayValue": "CPOF"
    },
    {
      "apiValue": "Custom Flows Filter001",
      "displayValue": "Custom Flows Filter001"
    },
    {
      "apiValue": "Directory",
      "displayValue": "Directory"
    },
    {
      "apiValue": "DNS",
      "displayValue": "DNS"
    }
  ]
}

```



```
    },
    {
      "apiValue": "Enterprise Applications",
      "displayValue": "Enterprise Applications"
    },
    {
      "apiValue": "FTP",
      "displayValue": "FTP"
    },
    {
      "apiValue": "HTTP",
      "displayValue": "HTTP"
    },
    {
      "apiValue": "HTTPS",
      "displayValue": "HTTPS"
    },
    {
      "apiValue": "Internet",
      "displayValue": "Internet"
    },
    {
      "apiValue": "IPSec AH",
      "displayValue": "IPSec AH"
    },
    {
      "apiValue": "IPSec ESP",
      "displayValue": "IPSec ESP"
    },
    {
      "apiValue": "IPv4 Traffic",
      "displayValue": "IPv4 Traffic"
    },
    {
      "apiValue": "IPv6 Traffic",
      "displayValue": "IPv6 Traffic"
    },
    {
      "apiValue": "Multicast Routing",
      "displayValue": "Multicast Routing"
    },
    {
      "apiValue": "Network Mail Services",
```



```
"displayValue": "Network Mail Services"
},
{
  "apiValue": "Network Management",
  "displayValue": "Network Management"
},
{
  "apiValue": "Peer-to-Peer/Non-essential",
  "displayValue": "Peer-to-Peer/Non-essential"
},
{
  "apiValue": "Routing",
  "displayValue": "Routing"
},
{
  "apiValue": "RTP",
  "displayValue": "RTP"
},
{
  "apiValue": "SAP",
  "displayValue": "SAP"
},
{
  "apiValue": "SIP",
  "displayValue": "SIP"
},
{
  "apiValue": "Skinny",
  "displayValue": "Skinny"
},
{
  "apiValue": "TCP Only",
  "displayValue": "TCP Only"
},
{
  "apiValue": "Teredo by IP",
  "displayValue": "Teredo by IP"
},
{
  "apiValue": "TFTP",
  "displayValue": "TFTP"
},
{
  }
```



```

        "apiValue": "UDP Only",
        "displayValue": "UDP Only"
    },
    {
        "apiValue": "Ventrilo",
        "displayValue": "Ventrilo"
    },
    {
        "apiValue": "Video",
        "displayValue": "Video"
    },
    {
        "apiValue": "Voice",
        "displayValue": "Voice"
    },
    {
        "apiValue": "Web",
        "displayValue": "Web"
    }
]
},
{
    "queryKey": "direction",
    "parameterType": "FlowDirectionParameter",
    "defaultValue": {
        "apiValue": "outbound",
        "displayValue": "Outbound"
    },
    "availableValues": [
        {
            "apiValue": "inbound",
            "displayValue": "Inbound"
        },
        {
            "apiValue": "outbound",
            "displayValue": "Outbound"
        },
        {
            "apiValue": "both",
            "displayValue": "Inbound and Outbound"
        }
    ]
}
},

```



```

{
  "queryKey": "flowType",
  "parameterType": "FlowTypeParameter",
  "defaultValue": {
    "apiValue": "basic",
    "displayValue": "Basic Flow"
  },
  "availableValues": [
    {
      "apiValue": "basic",
      "displayValue": "Basic Flow"
    },
    {
      "apiValue": "medianet",
      "displayValue": "Medianet"
    },
    {
      "apiValue": "avc",
      "displayValue": "Application (AVC)"
    },
    {
      "apiValue": "nsl",
      "displayValue": "Firewall"
    },
    {
      "apiValue": "pfr",
      "displayValue": "PfR"
    },
    {
      "apiValue": "wireless",
      "displayValue": "Wireless"
    },
    {
      "apiValue": "unknown",
      "displayValue": "Unknown"
    }
  ]
},
{
  "queryKey": "executionType",
  "parameterType": "ExecutionTypeParameter",
  "defaultValue": {
    "apiValue": "timeseries",

```

```

    "displayValue": "Time Series"
  },
  "availableValues": [
    {
      "apiValue": "timeseries",
      "displayValue": "Time Series"
    },
    {
      "apiValue": "aggregation",
      "displayValue": "Aggregation"
    }
  ]
},
{
  "queryKey": "sortBy",
  "parameterType": "TotalDataSortByParameter",
  "defaultValue": {
    "apiValue": "BIT_RATE",
    "displayValue": "Bit Rate"
  },
  "availableValues": [
    {
      "apiValue": "BYTE",
      "displayValue": "Bytes"
    },
    {
      "apiValue": "BIT_RATE",
      "displayValue": "Bit Rate"
    },
    {
      "apiValue": "PACKET",
      "displayValue": "Packets"
    },
    {
      "apiValue": "PACKET_RATE",
      "displayValue": "Packet Rate"
    },
    {
      "apiValue": "FLOW",
      "displayValue": "Flow"
    }
  ]
},

```



```

{
  "queryKey": "flexSearch",
  "parameterType": "FlexSearchParameter",
  "defaultValue": {
    "apiValue": "",
    "displayValue": ""
  }
},
{
  "queryKey": "businessHours",
  "parameterType": "BusinessHoursParameter",
  "defaultValue": {
    "apiValue": "none",
    "displayValue": "All Hours"
  },
  "availableValues": [
    {
      "apiValue": "none",
      "displayValue": "All Hours"
    },
    {
      "apiValue": "enable",
      "displayValue": "Business Hours Only"
    },
    {
      "apiValue": "invert",
      "displayValue": "Non-Business Hours Only"
    }
  ]
},
{
  "queryKey": "binDuration",
  "parameterType": "FlowBinDurationParameter",
  "defaultValue": {
    "apiValue": "auto",
    "displayValue": "Auto"
  },
  "availableValues": [
    {
      "apiValue": "auto",
      "displayValue": "Auto"
    },
    {

```



```

    "apiValue": "1min",
    "displayValue": "1 Minute"
  },
  {
    "apiValue": "5min",
    "displayValue": "5 Minutes"
  }
]
},
"parameters": {
  "startTime": "1493735082737",
  "endTime": "1493735982737",
  "deviceSerial": "ALL_DEVICES_SERIAL",
  "interface": "All Interfaces",
  "displayFilter": "No Display Filtering",
  "direction": "outbound",
  "flowType": "basic",
  "executionType": "timeseries",
  "sortBy": "BIT_RATE",
  "flexSearch": "",
  "businessHours": "none",
  "binDuration": "auto"
}
},
{
  "reportInfo": {
    "id": "16",
    "reportCategory": "qos",
    "reportBase": "BURSTABLE_RATE",
    "name": "Interface Burstable Rate",
    "group": "Interface",
    "isSavedReport": false,
    "availableParameters": [
      {
        "queryKey": "flexSearch",
        "parameterType": "FlexSearchParameter",
        "defaultValue": {
          "apiValue": "",
          "displayValue": ""
        }
      }
    ]
  }
},

```

```

{
  "queryKey": "startTime",
  "parameterType": "StartDateParameter"
},
{
  "queryKey": "direction",
  "parameterType": "BurstableInterfaceDirectionParameter",
  "defaultValue": {
    "apiValue": "combined",
    "displayValue": "Inbound and Outbound Combined"
  },
  "availableValues": [
    {
      "apiValue": "combined",
      "displayValue": "Inbound and Outbound Combined"
    },
    {
      "apiValue": "inbound",
      "displayValue": "Inbound"
    },
    {
      "apiValue": "outbound",
      "displayValue": "Outbound"
    },
    {
      "apiValue": "separated",
      "displayValue": "Inbound and Outbound Separated"
    }
  ]
},
{
  "queryKey": "executionType",
  "parameterType": "ExecutionTypeParameter",
  "defaultValue": {
    "apiValue": "aggregation",
    "displayValue": "Aggregation"
  },
  "availableValues": [
    {
      "apiValue": "aggregation",
      "displayValue": "Aggregation"
    }
  ]
}

```





```

    },
    {
      "queryKey": "endTime",
      "parameterType": "EndDateParameter"
    }
  ],
  },
  "parameters": {
    "flexSearch": "",
    "startTime": "1493735081122",
    "direction": "combined",
    "executionType": "aggregation",
    "endTime": "1493735981122"
  }
},
"sharingConfig": [],
"visibility": "private",
"callback": null,
"timeZone": {
  "id": "Asia/Calcutta",
  "enableDst": false,
  "supportsDst": false,
  "standardOffset": 19800
},
"time": "2017-05-02T14:57:05.129Z",
"status": "https://<server-uri>:8093/v1/reports/queue/044381da-3832-430e-90de-8a0fef6ec45",
"result": "https://<server-uri>:8093/v1/reports/results/044381da-3832-430e-90de-8a0fef6ec45"
}
}

```

## Code Sample

We have used **172.31.1.200** as our LiveNX IP, **74285f2c7356d889f86b1d5900a110ba** as access\_token from Authentication API

## cURL

```

curl -X POST \
  https://172.31.1.200:8093/v1/reports/queue \
  -H 'authorization: Bearer 74285f2c7356d889f86b1d5900a110ba' \

```

```

-H 'cache-control: no-cache' \
-H 'content-type: application/json' \
-d '{
  "name": "Application",
  "reports": [
    {
      "reportId": {
        "category": "flow",
        "id": "8"
      },
      "parameters": {
        "startTime": 1493735082737,
        "endTime": 1493735982737,
        "deviceSerial": "ALL_DEVICES_SERIAL",
        "interface": "All Interfaces",
        "displayFilter": "No Display Filtering",
        "direction": "outbound",
        "flowType": "basic",
        "executionType": "timeseries",
        "sortBy": "BIT_RATE",
        "flexSearch": "",
        "businessHours": "none",
        "binDuration": "auto"
      }
    }
  ],
  "timeZone": {
    "id": "Asia/Calcutta",
    "enableDst": false
  },
  "sharingConfig": [
  ]
}'

```

## NodeJS

```

var unirest = require("unirest");

var req = unirest("POST", "https://172.31.1.200:8093/v1/reports/queue");

req.headers({
  "cache-control": "no-cache",

```

```

"authorization": "Bearer 74285f2c7356d889f86b1d5900a110ba",
"content-type": "application/json"
});

req.type("json");
req.send({
  "name": "Application",
  "reports": [
    {
      "reportId": {
        "category": "flow",
        "id": "8"
      },
      "parameters": {
        "startTime": 1493735082737,
        "endTime": 1493735982737,
        "deviceSerial": "ALL_DEVICES_SERIAL",
        "interface": "All Interfaces",
        "displayFilter": "No Display Filtering",
        "direction": "outbound",
        "flowType": "basic",
        "executionType": "timeseries",
        "sortBy": "BIT_RATE",
        "flexSearch": "",
        "businessHours": "none",
        "binDuration": "auto"
      }
    }
  ],
  "timeZone": {
    "id": "Asia/Calcutta",
    "enableDst": false
  },
  "sharingConfig": []
});

req.end(function (res) {
  if (res.error) throw new Error(res.error);

  console.log(res.body);
});

```

```
func main() {

    url := "https://172.31.1.200:8093/v1/reports/queue"

    payload := strings.NewReader("{\"r\\n \\\"name\\\": \\\"Application\\\",\\r\\n \\\"reports\\\": [\\r\\n  {\\r\\n    \\\"reportId\\\": {\\r\\n      \\\"category\\\": \\\"flow\\\",\\r\\n \\\"id\\\": \\\"8\\\"\\r\\n  },\\r\\n    \\\"parameters\\\": {\\r\\n      \\\"startTime\\\": 1493735082737,\\r\\n      \\\"endTime\\\": 1493735982737,\\r\\n      \\\"deviceSerial\\\": \\\"ALL_DEVICES_SERIAL\\\",\\r\\n      \\\"interface\\\": \\\"All Interfaces\\\",\\r\\n \\\"displayFilter\\\": \\\"No Display Filtering\\\",\\r\\n      \\\"direction\\\": \\\"outbound\\\",\\r\\n \\\"flowType\\\": \\\"basic\\\",\\r\\n      \\\"executionType\\\": \\\"timeseries\\\",\\r\\n \\\"sortBy\\\": \\\"BIT_RATE\\\",\\r\\n      \\\"flexSearch\\\": \\\"\\\",\\r\\n      \\\"businessHours\\\": \\\"none\\\",\\r\\n      \\\"binDuration\\\": \\\"auto\\\"\\r\\n    }\\r\\n  }\\r\\n ],\\r\\n \\\"timeZone\\\": {\\r\\n    \\\"id\\\": \\\"Asia/Calcutta\\\",\\r\\n    \\\"enableDst\\\": false\\r\\n  },\\r\\n \\\"sharingConfig\\\": [\\r\\n    \\r\\n  ]\\r\\n}")

    req, _ := http.NewRequest("POST", url, payload)

    req.Header.Add("content-type", "application/json")
    req.Header.Add("authorization", "Bearer 74285f2c7356d889f86b1d5900a110ba")
    req.Header.Add("cache-control", "no-cache")

    res, _ := http.DefaultClient.Do(req)

    defer res.Body.Close()
    body, _ := ioutil.ReadAll(res.Body)

    fmt.Println(res)
    fmt.Println(string(body))

}
```

```
HttpResponse<String> response =  
Unirest.post("https://172.31.1.200:8093/v1/reports/queue")  
.header("content-type", "application/json")  
.header("authorization", "Bearer 74285f2c7356d889f86b1d5900a110ba")  
.header("cache-control", "no-cache")  
.body("{\"name\": \"Application\", \"reports\": [ {\"reportId\": {\"category\": \"flow\", \"id\": \"8\"}, \"parameters\": {\"startTime\": 1493735082737, \"endTime\":
```

```
1493735982737,\r\n    \deviceSerial\": \ALL_DEVICES_SERIAL\", \r\n
\interface\": \All Interfaces\", \r\n    \displayFilter\": \No Display
Filtering\", \r\n    \direction\": \outbound\", \r\n    \flowType\": \basic\", \r\n
\executionType\": \timeseries\", \r\n    \sortBy\": \BIT_RATE\", \r\n
\flexSearch\": \", \r\n    \businessHours\": \none\", \r\n    \binDuration\":
\auto\", \r\n    } \r\n    } \r\n ], \r\n \timeZone\": { \r\n    \id\":
\Asia/Calcutta\", \r\n    \enableDst\": false \r\n }, \r\n \sharingConfig\": [ \r\n
\r\n ] \r\n } )
.asString();
```

## Python

```
import requests

url = "https://172.31.1.200:8093/v1/reports/queue"

payload = "{\r\n  \"name\": \"Application\", \r\n  \"reports\": [\r\n    {\r\n      \"reportId\": {\r\n        \"category\": \"flow\", \r\n        \"id\": \"8\" \r\n      }, \r\n      \"parameters\": {\r\n        \"startTime\": 1493735082737, \r\n        \"endTime\": 1493735982737, \r\n        \"deviceSerial\": \"ALL_DEVICES_SERIAL\", \r\n        \"interface\": \"All Interfaces\", \r\n        \"displayFilter\": \"No Display Filtering\", \r\n        \"direction\": \"outbound\", \r\n        \"flowType\": \"basic\", \r\n        \"executionType\": \"timeseries\", \r\n        \"sortBy\": \"BIT_RATE\", \r\n        \"flexSearch\": \"\", \r\n        \"businessHours\": \"none\", \r\n        \"binDuration\": \"auto\", \r\n        } \r\n      } \r\n    ], \r\n    \"timeZone\": { \r\n      \"id\": \"Asia/Calcutta\", \r\n      \"enableDst\": false \r\n    }, \r\n    \"sharingConfig\": [ \r\n      \r\n    ] \r\n  }"
headers = {
    'content-type': 'application/json',
    'authorization': "Bearer 74285f2c7356d889f86b1d5900a110ba",
    'cache-control': "no-cache"
}

response = requests.request("POST", url, data=payload, headers=headers)

print(response.text)
```

## Reports – Flow

Description: We will see the flow id and the default parameters required

### Required Parameters

\* Need to know Device Serial

StartTime and EndTime can be fetched from <https://currentmillis.com/>

EndTime should be the latest time



Name	Flow id	Parameters
<i>Top Conversations</i>	0	"startTime": 1495595546049, "endTime": 1495596446049, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Bidirectional Source/Destination Pair</i>	1	"startTime": 1495595547284, "endTime": 1495596447284, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Destination Address</i>	2	"startTime": 1495595547297, "endTime": 1495596447297, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"

<i>Source Address</i>	3	"startTime": 1495595547284, "endTime": 1495596447284, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "inbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Source or Destination Address</i>	4	"startTime": 1495595547285, "endTime": 1495596447285, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "both", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Address Pair</i>	5	"startTime": 1495595547268, "endTime": 1495596447268, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"



<i>Source Address Popularity</i>	6	"startTime": 1495595547267, "endTime": 1495596447267, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "inbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "DISSEMINATION", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Destination Address Popularity</i>	7	"startTime": 1495595547264, "endTime": 1495596447264, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "DISSEMINATION", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Application</i>	8	"startTime": 1495595547262, "endTime": 1495596447262, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"

<i>Protocol</i>	9	"startTime": 1495595547248, "endTime": 1495596447248, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Protocol Port</i>	10	"startTime": 1495595547246, "endTime": 1495596447246, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>AVC Application</i>	11	"startTime": 1495595547228, "endTime": 1495596447228, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "avc", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"

<i>Application Group</i>	12	"startTime": 1495595547228, "endTime": 1495596447228, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>DSCP vs Application</i>	13	"startTime": 1495595547221, "endTime": 1495596447221, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>DSCP</i>	14	"startTime": 1495595547219, "endTime": 1495596447219, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
	15	

<i>AS Pair</i>	16	"startTime": 1495595547217, "endTime": 1495596447217, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Bidirectional AS Pair</i>	17	"startTime": 1495595547206, "endTime": 1495596447206, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Destination AS</i>	18	"startTime": 1495595547191, "endTime": 1495596447191, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"

<i>Source AS</i>	19	"startTime": 1495595547176, "endTime": 1495596447176, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "inbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Source or Destination AS</i>	20	"startTime": 1495595547169, "endTime": 1495596447169, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "both", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Bidirectional Network Pair</i>	21	"startTime": 1495595547167, "endTime": 1495596447167, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"

<i>Destination Network</i>	22	"startTime": 1495595547154, "endTime": 1495596447154, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Network Pair</i>	23	"startTime": 1495595547153, "endTime": 1495596447153, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Source Network</i>	24	"startTime": 1495595547152, "endTime": 1495596447152, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "inbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"

<i>Source or Destination Network</i>	25	"startTime": 1495595547150, "endTime": 1495596447150, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "both", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Traffic Volume Pair</i>	26	"startTime": 1495595547149, "endTime": 1495596447149, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "both", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Top Applications Performance</i>	27	"startTime": 1495595547148, "endTime": 1495596447148, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "flowType": "avc", "executionType": "aggregation", "sortBy": "AVC_TOTAL_VOLUME", "flexSearch": "", "businessHours": "none", "binDuration": "auto"

<i>Policy Classification</i>	28	"startTime": 1495595547130, "endTime": 1495596447130, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "both", "flowType": "avc", "executionType": "timeseries", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Top Policy Performance</i>	29	"startTime": 1495595547127, "endTime": 1495596447127, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "flowType": "avc", "executionType": "aggregation", "sortBy": "AVC_TOTAL_VOLUME", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Top Policy Applications Performance</i>	30	"startTime": 1495595547099, "endTime": 1495596447099, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "flowType": "avc", "executionType": "aggregation", "sortBy": "AVC_TOTAL_VOLUME", "flexSearch": "", "businessHours": "none", "binDuration": "auto"



<i>HTTP Host</i>	31	"startTime": 1495595547096, "endTime": 1495596447096, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "avc", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Network Security Denied Events</i>	32	"startTime": 1495595547094, "endTime": 1495596447094, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "inbound", "flowType": "nse1", "executionType": "timeseries", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>ACL Pair</i>	33	"startTime": 1495595547073, "endTime": 1495596447073, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "inbound", "flowType": "nse1", "executionType": "timeseries", "flexSearch": "", "businessHours": "none", "binDuration": "auto"

<i>Out of Policy Events</i>	34	"startTime": 1495595547070, "endTime": 1495596447070, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "flowType": "pfr", "executionType": "timeseries", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Alerts by Site</i>	35	"startTime": 1495595547070, "endTime": 1495596447070, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "flowType": "pfr", "executionType": "timeseries", "sortBy": "TOTAL_ALERTS", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Alerts by Service Provider</i>	36	"startTime": 1495595547052, "endTime": 1495596447052, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "flowType": "pfr", "executionType": "timeseries", "sortBy": "TOTAL_ALERTS", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Alerts by App Group (DSCP)</i>	37	"startTime": 1495595546919, "endTime": 1495596446919, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "flowType": "pfr", "executionType": "timeseries", "sortBy": "TOTAL_ALERTS", "flexSearch": "", "businessHours": "none", "binDuration": "auto"



<i>Alerts by Site Pair</i>	38	"startTime": 1495595546917, "endTime": 1495596446917, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "flowType": "pfr", "executionType": "timeseries", "sortBy": "TOTAL_ALERTS", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Alerts All</i>	39	"startTime": 1495595546912, "endTime": 1495596446912, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "flowType": "pfr", "executionType": "timeseries", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Corrected vs. Uncorrected</i>	40	"startTime": 1495595546898, "endTime": 1495596446898, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "flowType": "pfr", "executionType": "timeseries", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>App Group (DSCP) Bandwidth</i>	41	"startTime": 1495595546849, "endTime": 1495596446849, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"



<i>App Group (DSCP) Bandwidth by Site</i>	42	"startTime": 1495595546834, "endTime": 1495596446834, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>App Group (DSCP) Bandwidth by Service Provider</i>	43	"startTime": 1495595546835, "endTime": 1495596446835, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Site Capacity Utilization</i>	44	"startTime": 1495595546828, "endTime": 1495596446828, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "CAPACITY_UTILIZATION", "flexSearch": "", "businessHours": "none", "binDuration": "auto"

<i>Site Capacity Utilization by App Group (DSCP)</i>	45	"startTime": 1495595546812, "endTime": 1495596446812, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "CAPACITY_UTILIZATION", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Site Capacity Utilization by Service Provider</i>	46	"startTime": 1495595546813, "endTime": 1495596446813, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "CAPACITY_UTILIZATION", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Service Provider Bandwidth</i>	47	"startTime": 1495595546816, "endTime": 1495596446816, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"

<i>Service Provider Bandwidth by App Group (DSCP)</i>	48	"startTime": 1495595546791, "endTime": 1495596446791, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Service Provider Bandwidth by Site</i>	49	"startTime": 1495595546790, "endTime": 1495596446790, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Performance by Site</i>	50	"startTime": 1495595546790, "endTime": 1495596446790, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "pfr", "executionType": "timeseries", "sortBy": "PFR_LOSS_AVG", "flexSearch": "", "businessHours": "none", "binDuration": "auto"

<i>Performance by App Group (DSCP)</i>	51	"startTime": 1495595546725, "endTime": 1495596446725, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "pfr", "executionType": "timeseries", "sortBy": "PFR_LOSS_AVG", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Performance by Service Provider</i>	52	"startTime": 1495595546637, "endTime": 1495596446637, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "pfr", "executionType": "timeseries", "sortBy": "PFR_LOSS_AVG", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Source Country</i>	53	"startTime": 1495595546617, "endTime": 1495596446617, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "inbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"

<i>Destination Country</i>	54	"startTime": 1495595546603, "endTime": 1495596446603, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Source Site Traffic</i>	55	"startTime": 1495595546597, "endTime": 1495596446597, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "inbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Destination Site Traffic</i>	56	"startTime": 1495595546598, "endTime": 1495596446598, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"



<i>Site Traffic</i>	57	"startTime": 1495595546598, "endTime": 1495596446598, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "both", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>User Filter</i>	58	"startTime": 1495595546577, "endTime": 1495596446577, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "both", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Interface Bandwidth</i>	59	"startTime": 1495595546570, "endTime": 1495596446570, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"

<i>Outbound Bandwidth Utilization</i>	60	"startTime": 1495595546570, "endTime": 1495596446570, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Bandwidth Summary</i>	61	"startTime": 1495595546561, "endTime": 1495596446561, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Interface Bandwidth Summary</i>	62	"startTime": 1495595546526, "endTime": 1495596446526, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"

<i>Jitter/Loss</i>	63	"startTime": 1495595546527, "endTime": 1495596446527, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "both", "flowType": "medianet", "executionType": "timeseries", "sortBy": "JITTER_MEAN", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Round-Trip Time</i>	64	"startTime": 1495595546545, "endTime": 1495596446545, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "both", "flowType": "medianet", "executionType": "timeseries", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Wireless SSID</i>	65	"startTime": 1495595546523, "endTime": 1495596446523, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "inbound", "flowType": "wireless", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"

<i>Wireless SSID DSCP</i>	66	"startTime": 1495595546525, "endTime": 1495596446525, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "inbound", "flowType": "wireless", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Wireless SSID Application</i>	67	"startTime": 1495595546518, "endTime": 1495596446518, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "inbound", "flowType": "wireless", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Wireless SSID Unique Clients</i>	68	"startTime": 1495595546559, "endTime": 1495596446559, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "inbound", "flowType": "wireless", "executionType": "timeseries", "sortBy": "DISSEMINATION", "flexSearch": "", "businessHours": "none", "binDuration": "auto"

<i>Wireless Access Point</i>	69	"startTime": 1495595546516, "endTime": 1495596446516, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "inbound", "flowType": "wireless", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Wireless Access Point Application</i>	70	"startTime": 1495595546516, "endTime": 1495596446516, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "inbound", "flowType": "wireless", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Wireless Access Point Unique Clients</i>	71	"startTime": 1495595546395, "endTime": 1495596446395, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "inbound", "flowType": "wireless", "executionType": "timeseries", "sortBy": "DISSEMINATION", "flexSearch": "", "businessHours": "none", "binDuration": "auto"

<i>Wireless Client</i>	72	"startTime": 1495595546487, "endTime": 1495596446487, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "inbound", "flowType": "wireless", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Device Flow Count</i>	73	"startTime": 1495595546394, "endTime": 1495596446394, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "both", "flowType": "basic", "executionType": "timeseries", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>AnyConnect Users</i>	74	"startTime": 1495595546395, "endTime": 1495596446395, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "flowType": "unknown", "executionType": "timeseries", "sortBy": "ANYCONNECT_L4BYTESOUT", "flexSearch": "", "businessHours": "none", "binDuration": "auto"

<i>AnyConnect User Summary</i>	75	"startTime": 1495595546382, "endTime": 1495596446382, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "flowType": "unknown", "executionType": "timeseries", "sortBy": "ANYCONNECT_L4BYTESOUT", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>AnyConnect User Devices</i>	76	"startTime": 1495595546365, "endTime": 1495596446365, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "flowType": "unknown", "executionType": "timeseries", "sortBy": "ANYCONNECT_L4BYTESOUT", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>AnyConnect Applications</i>	77	"startTime": 1495595546347, "endTime": 1495596446347, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "flowType": "unknown", "executionType": "timeseries", "sortBy": "ANYCONNECT_L4BYTESOUT", "flexSearch": "", "businessHours": "none", "binDuration": "auto"

<i>AnyConnect Application Versions</i>	78	"startTime": 1495595546313, "endTime": 1495596446313, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "flowType": "unknown", "executionType": "timeseries", "sortBy": "ANYCONNECT_L4BYTESOUT", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>IPs and Ports</i>	79	"startTime": 1495595546313, "endTime": 1495596446313, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Traffic Class</i>	80	"startTime": 1495595546314, "endTime": 1495596446314, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"





<i>Business Relevance</i>	81	"startTime": 1495595546288, "endTime": 1495596446288, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>User Filter DSCP Audit</i>	82	"startTime": 1495595546287, "endTime": 1495596446287, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "both", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Application DSCP Audit</i>	83	"startTime": 1495595546285, "endTime": 1495596446285, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "both", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"

<i>Site to Site Application Performance</i>	84	"startTime": 1495595546259, "endTime": 1495596446259, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Ziften Account</i>	85	"startTime": 1495595546214, "endTime": 1495596446214, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Ziften Internal Name</i>	86	"startTime": 1495595546199, "endTime": 1495596446199, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"



<i>Ziften Machine Name</i>	87	"startTime": 1495595546193, "endTime": 1495596446193, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Ziften OS Name</i>	88	"startTime": 1495595546130, "endTime": 1495596446130, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "outbound", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"
<i>Site to Site Outbound WAN Application Status</i>	89	"startTime": 1495595546074, "endTime": 1495596446074, "deviceSerial": "ALL_DEVICES_SERIAL", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "flowType": "basic", "executionType": "timeseries", "sortBy": "BIT_RATE", "flexSearch": "", "businessHours": "none", "binDuration": "auto"

<i>Top Analysis*</i>	90	"startTime": 1495595546034, "endTime": 1495596446034, "deviceSerial": "9LKIQ83QKXABF8UMKX34D", "interface": "All Interfaces", "displayFilter": "No Display Filtering", "direction": "both", "flowType": "basic", "topAnalysisDisplayType": "bytes", "executionType": "aggregation", "flexSearch": ""
<i>Security Analysis</i>	67890	"startTime": 1495595546052, "endTime": 1495596446052, "displayFilter": "No Display Filtering", "direction": "both", "executionType": "aggregation", "flexSearch": ""



## Reports – QoS

Description: We will see the QoS id and the default parameters required

### Required Parameters

\* Need to know Device Serial

\*\* Need to know Device Serial along with Interface

StartTime and EndTime can be fetched from <https://currentmillis.com/>

EndTime should be the latest time



Name	QoS id	Parameters
<i>NBAR and Post-Policy**</i>	0	"deviceSerial": "9LKIQ83QKXABF8UMKX34D", "interface": "GigabitEthernet0/0", "direction": "outbound", "startTime": 1495595544459, "endTime": 1495596444459, "businessHours": "none", "executionType": "timeseries"
<i>Pre-Policy and Post-Policy**</i>	1	"deviceSerial": "9LKIQ83QKXABF8UMKX34D", "interface": "GigabitEthernet0/0", "direction": "outbound", "startTime": 1495595544958, "endTime": 1495596444958, "businessHours": "none", "executionType": "timeseries"
<i>Pre-Policy and Post-Policy Drops</i>	2	"deviceSerial": "9LKIQ83QKXABF8UMKX34D", "interface": "GigabitEthernet0/0", "direction": "outbound", "startTime": 1495595544937, "endTime": 1495596444937, "businessHours": "none", "executionType": "timeseries"
<i>Interface/Interface Drops**</i>	3	"executionType": "timeseries", "deviceSerial": "9LKIQ83QKXABF8UMKX34D", "endTime": 1495596444495, "startTime": 1495595544495, "interface": "GigabitEthernet0/0"
<i>Interface Errors**</i>	4	"deviceSerial": "9LKIQ83QKXABF8UMKX34D", "interface": "GigabitEthernet0/0", "startTime": 1495595544937, "endTime": 1495596444937, "executionType": "timeseries", "businessHours": "none"
<i>Top Class Bandwidths</i>	5	"direction": "outbound", "executionType": "aggregation", "excludeClassDefaults": false, "flexSearch": "", "deviceSerial": "ALL_DEVICES_SERIAL", "endTime": 1495596444956, "startTime": 1495595544956

<i>Top Class Drops</i>	6	"direction": "outbound", "executionType": "aggregation", "excludeClassDefaults": false, "flexSearch": "", "deviceSerial": "ALL_DEVICES_SERIAL", "endTime": 1495596444938, "startTime": 1495595544938
<i>Top Interface Bandwidths</i>	7	"direction": "outbound", "executionType": "aggregation", "flexSearch": "", "deviceSerial": "ALL_DEVICES_SERIAL", "endTime": 1495596444935, "startTime": 1495595544935
<i>Top Interface Drops</i>	8	"direction": "outbound", "executionType": "aggregation", "flexSearch": "", "deviceSerial": "ALL_DEVICES_SERIAL", "endTime": 1495596444933, "startTime": 1495595544933
<i>Top CPU Usage</i>	9	"executionType": "aggregation", "flexSearch": "", "deviceSerial": "ALL_DEVICES_SERIAL", "endTime": 1495596444908, "startTime": 1495595544908
<i>Top Memory Usage</i>	10	"executionType": "aggregation", "flexSearch": "", "deviceSerial": "ALL_DEVICES_SERIAL", "endTime": 1495596444907, "startTime": 1495595544907
<i>Top Application Bandwidth</i>	11	"direction": "outbound", "executionType": "aggregation", "flexSearch": "", "deviceSerial": "ALL_DEVICES_SERIAL", "endTime": 1495596444918, "startTime": 1495595544918
<i>Interface Bandwidth**</i>	12	"businessHours": "none", "executionType": "timeseries", "deviceSerial": "9LKIQ83QKXABF8UMKX34D", "endTime": 1495596444891, "startTime": 1495595544891, "interface": "GigabitEthernet0/0"

<i>Interface Utilization**</i>	13	"businessHours": "none", "executionType": "timeseries", "binDuration": "auto", "deviceSerial": "9LKIQ83QKXABF8UMKX34D", "endTime": 1495596444895, "startTime": 1495595544895, "interface": "GigabitEthernet0/0"
<i>Device CPU/Memory Usage*</i>	14	"deviceSerial": "9LKIQ83QKXABF8UMKX34D", "startTime": 1495595544893, "endTime": 1495596444893, "executionType": "timeseries"
<i>Site Bandwidth</i>	15	"site": "Unspecified", "direction": "outbound", "wan": false, "startTime": 1495595544890, "endTime": 1495596444890, "executionType": "timeseries"
<i>Interface Burstable Rate</i>	16	"executionType": "aggregation", "flexSearch": "", "endTime": 1495596444893, "direction": "combined", "startTime": 1495595544893
<i>Site WAN Interface Utilization</i>	17	"startTime": 1495595544892, "endTime": 1495596444892, "executionType": "aggregation"
<i>Site Alert</i>	18	"startTime": 1495595544877, "endTime": 1495596444877, "executionType": "aggregation", "flexSearch": ""
<i>Site Alert Detail</i>	19	"startTime": 1495595544892, "endTime": 1495596444892, "executionType": "aggregation"
<i>Alerts</i>	20	"startTime": 1495595544884, "endTime": 1495596444884, "flexSearch": "", "deviceSerial": "ALL_DEVICES_SERIAL", "alertsType": "all", "executionType": "timeseries"
<i>Devices</i>	21	"executionType": "aggregation", "flexSearch": ""
<i>Interfaces</i>	22	"executionType": "aggregation", "flexSearch": ""





<i>Site Count by Alert Type</i>	23	"site": "All Sites (All Devices)", "executionType": "aggregation", "endTime": 1495596444819, "startTime": 1495595544819
<i>Alerts/Utilization by Site</i>	24	"startTime": 1495595544861, "endTime": 1495596444861, "site": "All Sites (All Devices)", "executionType": "aggregation"
<i>Alerts by Device</i>	25	"startTime": 1495595544723, "endTime": 1495596444723, "site": "All Sites (All Devices)", "executionType": "aggregation"
<i>Alerts by Interface</i>	26	"startTime": 1495595544859, "endTime": 1495596444859, "site": "All Sites (All Devices)", "executionType": "aggregation"
<i>Device Count by Alert Type</i>	27	"startTime": 1495595544748, "endTime": 1495596444748, "site": "All Sites (All Devices)", "executionType": "aggregation"
<i>Site WAN Interface Bandwidth by Application</i>	28	"direction": "outbound", "site": "All Sites (All Devices)", "executionType": "aggregation", "endTime": 1495596444743, "startTime": 1495595544743
<i>Device Status</i>	29	"site": "All Sites (All Devices)", "executionType": "aggregation", "endTime": 1495596444806, "startTime": 1495595544806
<i>Interface Status*</i>	30	"executionType": "aggregation", "endTime": 1495596444770, "deviceSerial": "9LKIQ83QKXABF8UMKX34D", "startTime": 1495595544770
<i>WAN Alerts/Bandwidth by Application</i>	31	"site": "All Sites (All Devices)", "executionType": "aggregation", "endTime": 1495596444721, "startTime": 1495595544721
<i>Top Changed - Interface Burstable Rate</i>	32	"comparisonMonth": "May 2017", "flexSearch": "", "businessHours": "none", "executionType": "aggregation"



<i>Top Changed - CPU Usage</i>	33	"deviceSerial": "ALL_DEVICES_SERIAL", "comparisonMonth": "May 2017", "flexSearch": "", "executionType": "aggregation", "businessHours": "none"
<i>Top Changed - Memory Usage</i>	34	"deviceSerial": "ALL_DEVICES_SERIAL", "comparisonMonth": "May 2017", "flexSearch": "", "businessHours": "none", "executionType": "aggregation"
<i>Post-Policy Drops**</i>	35	"deviceSerial": "9LKIQ83QKXABF8UMKX34D", "interface": "GigabitEthernet0/0", "direction": "outbound", "startTime": 1495595544700, "endTime": 1495596444700, "businessHours": "none", "executionType": "timeseries"
<i>Top Changed Comparison - Interface Burstable Rate</i>	36	"startTime": 1495595544656, "endTime": 1495596444656, "flexSearch": "", "businessHours": "none", "executionType": "aggregation"
<i>Top Changed Comparison - CPU Usage</i>	37	"deviceSerial": "ALL_DEVICES_SERIAL", "startTime": 1495595544607, "endTime": 1495596444607, "flexSearch": "", "executionType": "aggregation", "businessHours": "none"
<i>Top Changed Comparison - Memory Usage</i>	38	"deviceSerial": "ALL_DEVICES_SERIAL", "startTime": 1495595544509, "endTime": 1495596444509, "flexSearch": "", "businessHours": "none", "executionType": "aggregation"

## More Code Samples

### Fetch all Site Status

Description: This API will return all Site Status. We need to get the bearer token from authentication API

<b>GET</b>	https://<server-uri>:8093/v1/siteStatus
------------	-----------------------------------------

We have used **172.31.1.200** as our LiveNX IP, **74285f2c7356d889f86b1d5900a110ba** as access\_token from Authentication API

### cURL

```
curl -X GET \  
  https://172.31.1.200:8093/v1/siteStatus \  
  -H 'authorization: Bearer 74285f2c7356d889f86b1d5900a110ba' \  
  -H 'cache-control: no-cache' \  
  -H 'content-type: application/json'
```

### NodeJS

```
var unirest = require("unirest");  
  
var req = unirest("GET", "https://172.31.1.200:8093/v1/siteStatus");  
  
req.headers({  
  "cache-control": "no-cache",  
  "authorization": "Bearer 74285f2c7356d889f86b1d5900a110ba",  
  "content-type": "application/json"  
});  
  
req.end(function (res) {  
  if (res.error) throw new Error(res.error);  
  
  console.log(res.body);  
});
```

## GO

```
package main

import (
    "fmt"
    "net/http"
    "io/ioutil"
)

func main() {

    url := "https://172.31.1.200:8093/v1/siteStatus"

    req, _ := http.NewRequest("GET", url, nil)

    req.Header.Add("content-type", "application/json")
    req.Header.Add("authorization", "Bearer 74285f2c7356d889f86b1d5900a110ba")
    req.Header.Add("cache-control", "no-cache")

    res, _ := http.DefaultClient.Do(req)

    defer res.Body.Close()
    body, _ := ioutil.ReadAll(res.Body)

    fmt.Println(res)
    fmt.Println(string(body))

}
```

## Java

```
HttpResponse<String> response = Unirest.get("https://172.31.1.200:8093/v1/siteStatus")
    .header("content-type", "application/json")
    .header("authorization", "Bearer 74285f2c7356d889f86b1d5900a110ba")
    .header("cache-control", "no-cache")
    .asString();
```

## Python

```
import requests

url = "https://172.31.1.200:8093/v1/siteStatus"
```

```
headers = {
  'content-type': 'application/json',
  'authorization': "Bearer 74285f2c7356d889f86b1d5900a110ba",
  'cache-control': "no-cache"
}

response = requests.request("GET", url, headers=headers)

print(response.text)
```

## Fetch all Device Status

Description: This API will return all Device Status. We need to get the bearer token from authentication API

<b>GET</b>	https://<server-uri>:8093/v1/deviceStatus
------------	-------------------------------------------

We have used **172.31.1.200** as our LiveNX IP, **74285f2c7356d889f86b1d5900a110ba** as access\_token from Authentication API

### cURL

```
curl -X GET \
  https://172.31.1.200:8093/v1/deviceStatus \
  -H 'authorization: Bearer 74285f2c7356d889f86b1d5900a110ba' \
  -H 'cache-control: no-cache' \
  -H 'content-type: application/json'
```

### NodeJS

```
var unirest = require("unirest");

var req = unirest("GET", "https://172.31.1.200:8093/v1/deviceStatus");

req.headers({
  "cache-control": "no-cache",
  "authorization": "Bearer 74285f2c7356d889f86b1d5900a110ba",
  "content-type": "application/json"
});
```

```
req.end(function (res) {  
  if (res.error) throw new Error(res.error);  
  
  console.log(res.body);  
});
```

## GO

```
package main  
  
import (  
    "fmt"  
    "net/http"  
    "io/ioutil"  
)  
  
func main() {  
  
    url := "https://172.31.1.200:8093/v1/deviceStatus"  
  
    req, _ := http.NewRequest("GET", url, nil)  
  
    req.Header.Add("content-type", "application/json")  
    req.Header.Add("authorization", "Bearer 74285f2c7356d889f86b1d5900a110ba")  
    req.Header.Add("cache-control", "no-cache")  
  
    res, _ := http.DefaultClient.Do(req)  
  
    defer res.Body.Close()  
    body, _ := ioutil.ReadAll(res.Body)  
  
    fmt.Println(res)  
    fmt.Println(string(body))  
  
}
```

## Java

```
HttpResponse<String> response =  
Unirest.get("https://172.31.1.200:8093/v1/deviceStatus")  
    .header("content-type", "application/json")
```

```
.header("authorization", "Bearer 74285f2c7356d889f86b1d5900a110ba")  
.header("cache-control", "no-cache")  
.asString();
```

## Python

```
import requests  
  
url = "https://172.31.1.200:8093/v1/deviceStatus"  
  
headers = {  
    'content-type': "application/json",  
    'authorization': "Bearer 74285f2c7356d889f86b1d5900a110ba",  
    'cache-control': "no-cache"  
}  
  
response = requests.request("GET", url, headers=headers)  
  
print(response.text)
```