Resource: job

Information about a capture job

http://{device}/api/npm.packet_capture/3.0/jobs/items/{id}

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>job</td>
<td>&lt;object&gt;</td>
<td>Information about a capture job</td>
<td>Required properties: [config];</td>
</tr>
<tr>
<td>job.config</td>
<td>&lt;object&gt;</td>
<td>Configuration of a capture job</td>
<td>Required properties: [name, enabled, vifgs, optimize_for_read];</td>
</tr>
<tr>
<td>job.config.capture_from_all_vifgs</td>
<td>&lt;boolean&gt;</td>
<td>If enabled, this capture job will ignore the field ‘vifgs’ and will capture from all existing VIFGs</td>
<td>Optional;</td>
</tr>
<tr>
<td>job.config.enabled</td>
<td>&lt;boolean&gt;</td>
<td>Whether the capture job is configured to run or not</td>
<td></td>
</tr>
<tr>
<td>job.config.filter</td>
<td>&lt;input_filter&gt;</td>
<td>Packet filter configuration</td>
<td></td>
</tr>
<tr>
<td>job.config.indexing</td>
<td>&lt;job_indexing&gt;</td>
<td>Parameters for Microflow indexing</td>
<td></td>
</tr>
<tr>
<td>job.config.name</td>
<td>&lt;string&gt;</td>
<td>Name of the job</td>
<td></td>
</tr>
<tr>
<td>job.config.optimize_for_read</td>
<td>&lt;boolean&gt;</td>
<td>Used to enable read optimization</td>
<td></td>
</tr>
<tr>
<td>job.config.retention_rules</td>
<td>&lt;packet_retention&gt;</td>
<td>Packet storage retention rules</td>
<td></td>
</tr>
<tr>
<td>job.config.snap_len</td>
<td>&lt;integer&gt;</td>
<td>It specifies the max number of bytes for every packet that will be stored to disk. If the packet is longer, it will be truncated</td>
<td>Optional; Default is 65535;</td>
</tr>
<tr>
<td>job.config.vifgs</td>
<td>&lt;array of &lt;integer&gt;&gt;</td>
<td>List of VIFGs the capture job is collecting packets from</td>
<td></td>
</tr>
<tr>
<td>job.config.vifgs[items]</td>
<td>&lt;integer&gt;</td>
<td>ID of the VIFG that this capture job captures from</td>
<td></td>
</tr>
<tr>
<td>job.id</td>
<td>&lt;string&gt;</td>
<td>The UUID of the capture job</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>job.state</td>
<td>&lt;object&gt;</td>
<td>Information about the state of a capture job</td>
<td>Read-only; Required properties: [stats, status];</td>
</tr>
<tr>
<td>job.state.stats</td>
<td>&lt;object&gt;</td>
<td>Capture job statistics</td>
<td>Read-only; Required properties: [packets_written, bytes_written];</td>
</tr>
<tr>
<td>bytes_written</td>
<td>&lt;object&gt;</td>
<td>Number of bytes written to disk (packets only, without overhead)</td>
<td>Read-only; Required properties: [total];</td>
</tr>
<tr>
<td>bytes_written.last_hour</td>
<td>&lt;integer&gt;</td>
<td>The value of the statistics in the last hour</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>bytes_written.last_minute</td>
<td>&lt;integer&gt;</td>
<td>The value of the statistics in the last minute</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>bytes_written.last_second</td>
<td>&lt;integer&gt;</td>
<td>The value of the statistic in the last second</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>bytes_written.total</td>
<td>&lt;integer&gt;</td>
<td>Total number of the statistic</td>
<td>Read-only;</td>
</tr>
<tr>
<td>packets_written</td>
<td>&lt;object&gt;</td>
<td>Number of packets written to disk</td>
<td>Read-only; Required properties: [total],</td>
</tr>
<tr>
<td>packets_written.last_hour</td>
<td>&lt;integer&gt;</td>
<td>The value of the statistics in the last hour</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>packets_written.last_minute</td>
<td>&lt;integer&gt;</td>
<td>The value of the statistics in the last minute</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>packets_written.last_second</td>
<td>&lt;integer&gt;</td>
<td>The value of the statistic in the last second</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>packets_written.total</td>
<td>&lt;integer&gt;</td>
<td>Total number of the statistic</td>
<td>Read-only;</td>
</tr>
<tr>
<td>job.state.status</td>
<td>&lt;object&gt;</td>
<td>Generic information on the capture job and its data</td>
<td>Read-only; Required properties: [state, packet_start_time, packet_end_time, capture_size, capture_disk_space];</td>
</tr>
<tr>
<td>job.state.status.capture_disk_space</td>
<td>&lt;integer&gt;</td>
<td>The actual size of the capture job on disk (including overhead)</td>
<td>Read-only;</td>
</tr>
<tr>
<td>job.state.status.capture_size</td>
<td>&lt;integer&gt;</td>
<td>The size of all the packets of the capture job (packets only, without overhead)</td>
<td>Read-only;</td>
</tr>
<tr>
<td>job.state.status.packet_end_time</td>
<td>&lt;string&gt;</td>
<td>The timestamp of the last packet of the capture job. The string represents a decimal value of seconds since epoch</td>
<td>Read-only;</td>
</tr>
<tr>
<td>job.state.status.packet_start_time</td>
<td>&lt;string&gt;</td>
<td>The timestamp of the first packet of the capture job. The string represents a decimal value of seconds since epoch</td>
<td>Read-only;</td>
</tr>
<tr>
<td>job.state.status.state</td>
<td>&lt;string&gt;</td>
<td>State of a capture job</td>
<td>Read-only; Values: UNKNOWN, STOPPED, RUNNING;</td>
</tr>
</tbody>
</table>

**Links**

**job: clear_packets**
Used to clear capture job data

```
POST http://{device}/api/npm.packet_capture/3.0/jobs/items/{id}/clear
```

Request Body
Do not provide a request body.

Response Body
On success, the server does not provide any body in the responses.

**job: delete**

```
DELETE http://{device}/api/npm.packet_capture/3.0/jobs/items/{id}
```

Response Body
On success, the server does not provide any body in the responses.

**job: get**

```
GET http://{device}/api/npm.packet_capture/3.0/jobs/items/{id}
```

Response Body
Returns a job data object.

**job: set**

```
PUT http://{device}/api/npm.packet_capture/3.0/jobs/items/{id}
```

Request Body
Provide a job data object.

Response Body
Returns a job data object.
### Resource: job_defaults

Default values to use when creating a new capture job

```
http://{device}/api/npm.packet_capture/3.0/info/job_defaults
```

#### JSON

```json
{
    "capture_from_all_vifgs": boolean,
    "enabled": boolean,
    "indexing": job_indexing,
    "name": string,
    "optimize_for_read": boolean,
    "retention_rules": packet_retention,
    "snap_len": integer
}
```

#### Links

**job_defaults: get**

```
GET http://{device}/api/npm.packet_capture/3.0/info/job_defaults
```

Response Body

Returns a job_defaults data object.

### Resource: jobs

Capture jobs configured on the system

```
http://{device}/api/npm.packet_capture/3.0/jobs
```

#### JSON

```json
{
    "items": [
        job
    ]
}
```

#### Links

**jobs: create**
POST http://{device}/api/npm.packet_capture/3.0/jobs

Request Body
Provide a **job** data object.

Response Body
Returns a **job** data object.

jobs: get

GET http://{device}/api/npm.packet_capture/3.0/jobs

Response Body
Returns a **jobs** data object.

**Resource: packet_broker_types**
Information about supported packet brokers

http://{device}/api/npm.packet_capture/3.0/info/packet_broker_types

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>packet_broker_types</td>
<td>&lt;array of &lt;object&gt;&gt;</td>
<td>Information about supported packet brokers</td>
<td></td>
</tr>
<tr>
<td>packet_broker_types[items]</td>
<td>&lt;object&gt;</td>
<td>Information about a single packet broker</td>
<td>Required properties: [type, type_pretty, description];</td>
</tr>
<tr>
<td>packet_broker_types[items].description</td>
<td>&lt;string&gt;</td>
<td>Description of the specific type of packet broker</td>
<td></td>
</tr>
<tr>
<td>packet_broker_types[items].type</td>
<td>&lt;packet_broker_types_type_enum&gt;</td>
<td>Enumerative for supported packet brokers</td>
<td>Values: NONE, UNKNOWN, CPACKET_TS_ONLY, CPACKET_TS_AND_SLICE, GIGAMON_HEADER, GIGAMON_TRAILER, GIGAMON_TRAILER_X12, ANUE, ARISTA, ARISTA_BEFORE_FCS;</td>
</tr>
<tr>
<td>packet_broker_types[items].type_pretty</td>
<td>&lt;string&gt;</td>
<td>User friendly name for the specific type of packet broker</td>
<td></td>
</tr>
</tbody>
</table>

**Links**

**packet_broker_types: get**

GET http://{device}/api/npm.packet_capture/3.0/info/packet_broker_types

Response Body
Returns a **packet_broker_types** data object.

**Resource: phys_interface**
Information about a monitoring interface

http://{device}/api/npm.packet_capture/3.0/interfaces/items/{name}

**JSON**

```json
{
  "description": string,
  "type": packet_broker_types_type_enum,
  "type_pretty": string
}
```
## phys_interface Object

### config Property

- **Type:** `object`
- **Description:** Information about a monitoring interface
- **Notes:** Required properties: `[config]`;

### name Property

- **Type:** `string`
- **Description:** The name of the monitoring interface
- **Notes:** Read-only; Optional;

### state Property

- **Type:** `object`
- **Description:** Information about the state of a monitoring interface
- **Notes:** Read-only; Required properties: `[status, interface_type, mtu, speed_duplex, stats]`; Optional;

### Configuration of a monitoring interface

- **Type:** `object`
- **Description:** Configuration of a monitoring interface
- **Notes:** Required properties: `[config]`;

### Interface Type

- **Type:** `string`
- **Description:** The type of interface. It gives a high level information about the type of hardware used (FILE is reserved for internal use)
- **Values:** `1G_COPPER`, `1G_FIBER`, `1G_VIRTUAL`, `10G_COPPER`, `10G_FIBER`, `10G_VIRTUAL`, `40G_FIBER`, `40G_VIRTUAL`, `100G_FIBER`, `100G_VIRTUAL`, `FILE`, `UNKNOWN`;

### Maximum Transmission Unit (MTU) of the interface

- **Type:** `integer`
- **Description:** The Maximum Transmission Unit (MTU) of the interface
- **Notes:** Read-only;

### The types of supported speed/duplex configurations. AUTONEG_* values will try to autonegotiate the corresponding speed in Mbps (AUTNEG will negotiate them all). All other values will force a specific speed in Mbps (FD full duplex, HD half duplex)

- **Type:** `phys_interface_capabilities_enum`
- **Values:** `UNKNOWN`, `AUTONEG`, `AUTONEG_10`, `AUTONEG_100`, `AUTONEG_1000`, `10_HD`, `10_FD`, `100_HD`, `100_FD`, `1000_FD`, `10000_FD`, `40000_FD`, `100000_FD`;

### The types of supported speed/duplex configurations

- **Type:** `phys_interface_capabilities_enum`
- **Values:** `UNKNOWN`, `AUTONEG`, `AUTONEG_10`, `AUTONEG_100`, `AUTONEG_1000`, `10_HD`, `10_FD`, `100_HD`, `100_FD`, `1000_FD`, `10000_FD`, `40000_FD`, `100000_FD`;

### Statistics for a monitoring interface

- **Type:** `object`
- **Description:** Statistics for a monitoring interface
- **Notes:** Required properties: `[bytes_total, packets_total, packets_dropped]`;

### Total number of bytes received by the interface (including drops)

- **Type:** `object`
- **Description:** Total number of bytes received by the interface (including drops)
- **Notes:** Read-only; Required properties: `[total]`;

### The value of the statistics in the last hour

- **Type:** `integer`
- **Description:** The value of the statistics in the last hour
- **Notes:** Read-only; Optional;

### The value of the statistics in the last minute

- **Type:** `integer`
- **Description:** The value of the statistics in the last minute
- **Notes:** Read-only; Optional;
<table>
<thead>
<tr>
<th>bytes_total.last_second</th>
<th>&lt;integer&gt;</th>
<th>The value of the statistic in the last second</th>
<th>Read-only; Optional;</th>
</tr>
</thead>
<tbody>
<tr>
<td>bytes_total.total</td>
<td>&lt;integer&gt;</td>
<td>Total number of the statistic</td>
<td>Read-only;</td>
</tr>
<tr>
<td>packets_dropped</td>
<td>&lt;object&gt;</td>
<td>Number of packets dropped by the interface</td>
<td>Read-only; Required properties: [total];</td>
</tr>
<tr>
<td>packets_dropped.last_hour</td>
<td>&lt;integer&gt;</td>
<td>The value of the statistic in the last hour</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>packets_dropped.last_minute</td>
<td>&lt;integer&gt;</td>
<td>The value of the statistic in the last minute</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>packets_dropped.total</td>
<td>&lt;integer&gt;</td>
<td>Total number of the statistic</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>packets_total</td>
<td>&lt;object&gt;</td>
<td>Total number of packets received by the interface</td>
<td>Read-only; Required properties: [total];</td>
</tr>
<tr>
<td>packets_total.last_hour</td>
<td>&lt;integer&gt;</td>
<td>The value of the statistic in the last hour</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>packets_total.last_minute</td>
<td>&lt;integer&gt;</td>
<td>The value of the statistic in the last minute</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>packets_total.last_second</td>
<td>&lt;integer&gt;</td>
<td>The value of the statistic in the last second</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>packets_total.total</td>
<td>&lt;integer&gt;</td>
<td>Total number of the statistic</td>
<td>Read-only;</td>
</tr>
<tr>
<td>phys_interface.state.status</td>
<td>&lt;string&gt;</td>
<td>The state of the interface. UP and DOWN provide link status information. CONNECTED and DISCONNECTED provide tcp connection information. MISSING is used when the interface is no longer detected on the system. DISABLED is used for interfaces that have been manually disabled.</td>
<td>Read-only; Values: UP, DOWN, CONNECTED, DISCONNECTED, MISSING, DISABLED, UNKNOWN;</td>
</tr>
</tbody>
</table>

**Links**

**phys_interface: delete**

**DELETE** `http://{device}/api/npm.packet_capture/3.0/interfaces/items/{name}`

**Response Body**

On success, the server does not provide any body in the responses.

**phys_interface: get**

**GET** `http://{device}/api/npm.packet_capture/3.0/interfaces/items/{name}`

**Response Body**

Returns a `phys_interface` data object.

**phys_interface: reset_stats**

Used to reset the statistics of the monitoring interface

**POST** `http://{device}/api/npm.packet_capture/3.0/interfaces/items/{name}/reset_stats`

**Request Body**

Do not provide a request body.

**Response Body**

On success, the server does not provide any body in the responses.

**phys_interface: set**

**PUT** `http://{device}/api/npm.packet_capture/3.0/interfaces/items/{name}`

**Request Body**

Provide a `phys_interface` data object.

**Response Body**
Resource: `phys_interface_capabilities`

Information about supported capabilities of a monitoring interface

http://{device}/api/npm.packet_capture/3.0/interfaces/items/{name}/capabilities

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>phys_interface_capabilities</code></td>
<td>&lt;object&gt;</td>
<td>Information about supported capabilities of a monitoring interface</td>
<td>Required properties: [name, speed_duplex];</td>
</tr>
<tr>
<td><code>phys_interface_capabilities.name</code></td>
<td>&lt;string&gt;</td>
<td>The name of the monitoring interface</td>
<td></td>
</tr>
<tr>
<td><code>phys_interface_capabilities.speed_duplex</code></td>
<td>&lt;array of &lt;phys_interface_capabilities_enum&gt;&gt;</td>
<td>An array of the speeds supported by the interface</td>
<td></td>
</tr>
<tr>
<td><code>phys_interface_capabilities.speed_duplex[items]</code></td>
<td>&lt;phys_interface_capabilities_enum&gt;</td>
<td>The types of supported speed/duplex configurations. AUTONEG_* values will try to autonegotiate the corresponding speed in Mbps (AUTNEG will negotiate them all). All other values will force a specific speed in Mbps (FD full duplex, HD half duplex)</td>
<td>Values: UNKNOWN, AUTONEG, AUTONEG_10, AUTONEG_100, AUTONEG_1000, 10_HD, 10_FD, 100_HD, 100_FD, 1000_FD, 10000_FD, 40000_FD, 100000_FD;</td>
</tr>
</tbody>
</table>

Links

**phys_interface_capabilities: get**

GET http://{device}/api/npm.packet_capture/3.0/interfaces/items/{name}/capabilities

Response Body

Returns a `phys_interface_capabilities` data object.

Resource: `phys_interfaces`

Monitoring interfaces detected on the system

http://{device}/api/npm.packet_capture/3.0/interfaces

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>phys_interfaces</code></td>
<td>&lt;object&gt;</td>
<td>Monitoring interfaces detected on the system</td>
<td>Required properties: [items];</td>
</tr>
<tr>
<td><code>phys_interfaces.items</code></td>
<td>&lt;array of &lt;phys_interface&gt;&gt;</td>
<td>List of monitoring interfaces</td>
<td></td>
</tr>
<tr>
<td><code>phys_interfaces.items[items]</code></td>
<td>&lt;phys_interface&gt;</td>
<td>Information about a monitoring interface</td>
<td></td>
</tr>
</tbody>
</table>

Links

**phys_interfaces: get**

GET http://{device}/api/npm.packet_capture/3.0/interfaces

Response Body

Returns a `phys_interface` data object.
## Resource: settings

Global settings for packet capture

![JSON](https://example.com/clipboard.png)

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>settings</td>
<td>&lt;object&gt;</td>
<td>Global settings for packet capture</td>
<td>Required properties: [packet_broker, deduplication];</td>
</tr>
<tr>
<td>settings.deduplication</td>
<td>&lt;object&gt;</td>
<td>Packet deduplication advanced settings</td>
<td></td>
</tr>
<tr>
<td>settings.deduplication.entries</td>
<td>&lt;integer&gt;</td>
<td>Size of internal queues used by packet deduplication engine</td>
<td></td>
</tr>
<tr>
<td>settings.deduplication.esp_alg_enabled</td>
<td>&lt;boolean&gt;</td>
<td>Enable/Disable deduplication on ESP packets with IP identification equal to 0</td>
<td></td>
</tr>
<tr>
<td>settings.deduplication.esp_timeout</td>
<td>&lt;string&gt;</td>
<td>Time window used for ESP packets (with IP identification equal to 0) instead of the global 'timeout'. The string represents a decimal value of seconds</td>
<td></td>
</tr>
<tr>
<td>settings.deduplication.tcp_alg_enabled</td>
<td>&lt;boolean&gt;</td>
<td>Enable/Disable deduplication on TCP packets with IP identification equal to 0</td>
<td></td>
</tr>
<tr>
<td>settings.deduplication.tcp_syn_ack_enabled</td>
<td>&lt;boolean&gt;</td>
<td>Enable/Disable deduplication on TCP SYN/ACK packets with IP identification equal to 0</td>
<td></td>
</tr>
<tr>
<td>settings.deduplication.tcp_syn_ack_timeout</td>
<td>&lt;string&gt;</td>
<td>Time window used for TCP SYN/ACK packets (with IP identification equal to 0) instead of the global 'timeout'. The string represents a decimal value of seconds</td>
<td></td>
</tr>
<tr>
<td>settings.deduplication.tcp_timeout</td>
<td>&lt;string&gt;</td>
<td>Time window used for TCP packets (with IP identification equal to 0) instead of the global 'timeout'. The string represents a decimal value of seconds</td>
<td></td>
</tr>
<tr>
<td>settings.deduplication.timeout</td>
<td>&lt;string&gt;</td>
<td>Time window within which packet deduplication is guaranteed. If two duplicate packets are received further apart than this timeout, they will not be considered duplicates. The string represents a decimal value of seconds</td>
<td></td>
</tr>
<tr>
<td>settings.deduplication.udp_alg_enabled</td>
<td>&lt;boolean&gt;</td>
<td>Enable/Disable deduplication on UDP packets</td>
<td></td>
</tr>
<tr>
<td>settings.deduplication.udp_timeout</td>
<td>&lt;string&gt;</td>
<td>Time window used for UDP packets instead of the global 'timeout'. The string represents a decimal value of seconds</td>
<td></td>
</tr>
<tr>
<td>settings.packet_broker</td>
<td>&lt;object&gt;</td>
<td>Packet Broker settings</td>
<td>Required properties: [type];</td>
</tr>
<tr>
<td>settings.packet_broker.type</td>
<td>packet_broker_types_type_enum</td>
<td>Enumerative for supported packet brokers</td>
<td>Values: NONE, UNKNOWN, CPACKET_TS_ONLY, CPACKET_TS_AND_SLICE, GIGAMON_HEADER, GIGAMON_TRAILER, GIGAMON_TRAILER_X12, ANUE, ARISTA, ARISTA_BEFORE_FCS</td>
</tr>
</tbody>
</table>

## Links

### settings: get

GET http://{device}/api/npm.packet_capture/3.0/settings

Response Body
- Returns a settings data object.

### settings: set

PUT http://{device}/api/npm.packet_capture/3.0/settings

Request Body
- Provide a settings data object.

Response Body
- Returns a settings data object.

## Resource: vifg

Information about a Virtual Interface Group (VIFG)

GET http://{device}/api/npm.packet_capture/3.0/vifgs/items/{id}

JSON
```json
{
  "config": {
    "bandwidth_capacity": integer,
    "dedup": boolean,
    "description": string,
    "enabled": boolean,
    "filter": input_filter,
    "flow_export": flow_export_filter,
    "is_other_vifg": boolean,
    "members": [ string ],
    "name": string
  },
  "id": integer,
  "state": {
    "bandwidth_capacity": integer,
    "mtu": integer,
    "stats": {
      "bytes_received": {
        "last_hour": integer,
        "last_minute": integer,
        "last_second": integer,
        "total": integer
      },
      "packets_duped": {
        "last_hour": integer,
        "last_minute": integer,
        "last_second": integer,
        "total": integer
      },
      "packets_received": {
        "last_hour": integer,
        "last_minute": integer,
        "last_second": integer,
        "total": integer
      }
    }
  }
}
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>vifg</td>
<td>&lt;object&gt;</td>
<td>Information about a Virtual Interface Group (VIFG)</td>
<td>Required properties: [config];</td>
</tr>
<tr>
<td>vifg.config</td>
<td>&lt;object&gt;</td>
<td>Configuration of a Virtual Interface Group (VIFG)</td>
<td>Required properties: [name, members, enabled];</td>
</tr>
<tr>
<td>vifg.config.bandwidth_capacity</td>
<td>&lt;integer&gt;</td>
<td>Custom value for the capacity of the VIFG (in Mbps). If set to zero, it will use default values (see the field bandwidth_capacity in the ‘state’ object)</td>
<td>Optional;</td>
</tr>
<tr>
<td>vifg.config.dedup</td>
<td>&lt;boolean&gt;</td>
<td>Whether or not packet deduplication is enabled on this VIFG</td>
<td>Optional;</td>
</tr>
<tr>
<td>vifg.config.description</td>
<td>&lt;string&gt;</td>
<td>Description of the VIFG</td>
<td>Optional;</td>
</tr>
<tr>
<td>vifg.config.enabled</td>
<td>&lt;boolean&gt;</td>
<td>Whether or not the VIFG is enabled (disabled VIFGs will drop all the their traffic)</td>
<td></td>
</tr>
<tr>
<td>vifg.config.filter</td>
<td>&lt;input_filter&gt;</td>
<td>Packet filter configuration</td>
<td></td>
</tr>
<tr>
<td>vifg.config.flow_export</td>
<td>&lt;flow_export_filter&gt;</td>
<td>Filter settings used for Flow Export</td>
<td></td>
</tr>
<tr>
<td>vifg.config.is_other_vifg</td>
<td>&lt;boolean&gt;</td>
<td>Whether or not this VIFG is the ‘other vifg’</td>
<td>Optional;</td>
</tr>
<tr>
<td>vifg.config.members</td>
<td>&lt;array of string&gt;</td>
<td>List of members associated with this VIFG</td>
<td></td>
</tr>
<tr>
<td>vifg.config.members[items]</td>
<td>&lt;string&gt;</td>
<td>A monitoring interface (in PHYSICAL_INTERFACE mode) or a VLAN ID (in VLAN mode) that belongs to the VIFG. The VLAN ID can be one of: an integer (0-4095), a colon-separated list of integers to represent QinQ (1:4:5), or ‘UNTAGGED’</td>
<td></td>
</tr>
<tr>
<td>vifg.config.name</td>
<td>&lt;string&gt;</td>
<td>Unique name of the VIFG</td>
<td></td>
</tr>
<tr>
<td>vifg.id</td>
<td>&lt;integer&gt;</td>
<td>The unique ID of the Virtual Interface Group (VIFG)</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>vifg.state</td>
<td>&lt;object&gt;</td>
<td>Information about the state of a Virtual Interface Group (VIFG)</td>
<td>Read-only; Required properties: [stats, bandwidth_capacity, mtu]; Optional;</td>
</tr>
<tr>
<td>vifg.state.bandwidth_capacity</td>
<td>&lt;integer&gt;</td>
<td>The (read-only) capacity of the VIFG in Mbps. In PHYSICAL_INTERFACE mode, it’s the sum of the speeds of the interfaces that the VIFG collects. In VLAN mode, the sum of the speeds of all interfaces. It can also be configured to a custom value (see the field bandwidth_capacity in the ‘config’ object)</td>
<td>Read-only;</td>
</tr>
<tr>
<td>vifg.state.mtu</td>
<td>&lt;integer&gt;</td>
<td>In PHYSICAL_INTERFACE mode, the max Maximum Transmission Unit (MTU) of the interfaces that the VIFG collects. In VLAN mode, the max MTU of all interfaces</td>
<td>Read-only;</td>
</tr>
<tr>
<td><code>vifg.state.stats</code></td>
<td><code>&lt;object&gt;</code></td>
<td>Statistics of a Virtual Interface Group (VIFG)</td>
<td>Read-only; Required properties: [bytes_received, packets_received, packets_duped];</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------</td>
<td>-----------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>

`bytes_received` <object> Number of bytes correctly received by VIFG (including duplicates) Read-only; Required properties: [total];

`bytes_received.last_hour` <integer> The value of the statistics in the last hour Read-only; Optional;

`bytes_received.last_minute` <integer> The value of the statistics in the last minute Read-only; Optional;

`bytes_received.last_second` <integer> The value of the statistic in the last second Read-only; Optional;

`bytes_received.total` <integer> Total number of the statistic Read-only;

`packets_duped` <object> Number of duplicate packets Read-only; Required properties: [total];

`packets_duped.last_hour` <integer> The value of the statistics in the last hour Read-only; Optional;

`packets_duped.last_minute` <integer> The value of the statistics in the last minute Read-only; Optional;

`packets_duped.last_second` <integer> The value of the statistic in the last second Read-only; Optional;

`packets_duped.total` <integer> Total number of the statistic Read-only;

`packets_received` <object> Number of packets correctly received by VIFG (including duplicates) Read-only; Required properties: [total];

`packets_received.last_hour` <integer> The value of the statistics in the last hour Read-only; Optional;

`packets_received.last_minute` <integer> The value of the statistics in the last minute Read-only; Optional;

`packets_received.last_second` <integer> The value of the statistic in the last second Read-only; Optional;

`packets_received.total` <integer> Total number of the statistic Read-only;

---

**Links**

**vifg: delete**

DELETE http://{device}/api/npm.packet_capture/3.0/vifgs/items/{id}

Response Body
On success, the server does not provide any body in the responses.

**vifg: get**

GET http://{device}/api/npm.packet_capture/3.0/vifgs/items/{id}

Response Body
Returns a `vifg` data object.

**vifg: reset_stats**

Used to reset the statistics of the Virtual Interface Group (VIFG)

POST http://{device}/api/npm.packet_capture/3.0/vifgs/items/{id}/reset_stats

Request Body
Do not provide a request body.

Response Body
On success, the server does not provide any body in the responses.

**vifg: set**

PUT http://{device}/api/npm.packet_capture/3.0/vifgs/items/{id}

Request Body
Provide a `vifg` data object.

Response Body
Returns a `vifg` data object.

---

**Resource: vifg_global_state**
Global state for Virtual Interface Groups (VIFGs)

```
http://{device}/api/npm.packet_capture/3.0/vifgs/state
```

### JSON

```
{
    "autodiscovery": {
        "maximum_reached": boolean
    }
}
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>vifg_global_state</td>
<td>&lt;object&gt;</td>
<td>Global state for Virtual Interface Groups (VIFGs)</td>
<td>Read-only; Required properties: [autodiscovery];</td>
</tr>
<tr>
<td>vifg_global_state.autodiscovery</td>
<td>&lt;object&gt;</td>
<td>Information about the status of VIFG autodiscovery</td>
<td>Read-only;</td>
</tr>
<tr>
<td>vifg_global_state.autodiscovery.maximum_reached</td>
<td>&lt;boolean&gt;</td>
<td>True if the maximum number of VIFGs has already been automatically discovered and no more VIFGs will be created. False, otherwise. The maximum is currently set to 2000 (including the 'other vifg')</td>
<td>Read-only; Optional;</td>
</tr>
</tbody>
</table>

### Links

**vifg_global_state: get**

GET `http://{device}/api/npm.packet_capture/3.0/vifgs/state`

**Response Body**

Returns a `vifg_global_state` data object.

### Resource: vifg_settings

Global settings for Virtual Interface Groups (VIFGs)

```
http://{device}/api/npm.packet_capture/3.0/vifgs/settings
```

### JSON

```
{
    "autodiscovery": {
        "default": {
            "dedup": boolean,
            "filter": input_filter,
            "flow_export": flow_export_filter
        },
        "enabled": boolean,
        "enable_aggregation": boolean,
        "grouping_type": string,
        "supported_grouping_types": [string]
    }
}
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>vifg_settings</td>
<td>&lt;object&gt;</td>
<td>Global settings for Virtual Interface Groups (VIFGs)</td>
<td>Required properties: [grouping_type, supported_grouping_types, enable_aggregation, autodiscovery];</td>
</tr>
<tr>
<td>vifg_settings.autodiscovery</td>
<td>&lt;object&gt;</td>
<td>Global settings for the VIFG autodiscovery feature</td>
<td>Required properties: [enabled, default];</td>
</tr>
<tr>
<td>vifg_settings.autodiscovery.default</td>
<td>&lt;object&gt;</td>
<td>Default values for VIFGs created by autodiscovery</td>
<td>Required properties: [filter, dedup, flow_export];</td>
</tr>
<tr>
<td>vifg_settings.autodiscovery.default.dedup</td>
<td>&lt;boolean&gt;</td>
<td>Enable or disable packet deduplication on VIFGs created by autodiscovery</td>
<td></td>
</tr>
<tr>
<td>vifg_settings.autodiscovery.default.filter</td>
<td>&lt;input_filter&gt;</td>
<td>Packet filter configuration</td>
<td></td>
</tr>
<tr>
<td>vifg_settings.autodiscovery.default.flow_export</td>
<td>&lt;flow export filter&gt;</td>
<td>Filter settings used for Flow Export</td>
<td></td>
</tr>
</tbody>
</table>
vifg_settings: enabled
Enable or disable VIFG autodiscovery

vifg_settings: enable_aggregation
Enable or disable VIFG aggregation in downstream processing

vifg_settings: grouping_type
The type of grouping used for incoming packets

vifg_settings: supported_grouping_types
Valid values for the field 'grouping_types'

vifg_settings: supported_grouping_types[items]
Supported grouping types

Links

vifg_settings: get
GET http://{device}/api/npm.packet_capture/3.0/vifgs/settings

Response Body
Returns a vifg_settings data object.

vifg_settings: set
PUT http://{device}/api/npm.packet_capture/3.0/vifgs/settings

Request Body
Provide a vifg_settings data object.

Response Body
Returns a vifg_settings data object.

Resource: vifgs
Virtual Interface Groups (VIFGs) configured on the system

http://{device}/api/npm.packet_capture/3.0/vifgs{?sort,is_other_vifg,limit,sortby,offset}

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>vifgs</td>
<td>&lt;object&gt;</td>
<td>Virtual Interface Groups (VIFGs) configured on the system</td>
<td>Required properties: [items];</td>
</tr>
<tr>
<td>vifgs.count</td>
<td>&lt;integer&gt;</td>
<td>The total number of Virtual Interface Groups (VIFGs)</td>
<td>Optional;</td>
</tr>
<tr>
<td>vifgs.items</td>
<td>&lt;array of &lt;vifg&gt;&gt;</td>
<td>List of Virtual Interface Groups (VIFGs)</td>
<td></td>
</tr>
<tr>
<td>vifgs.items[items]</td>
<td>&lt;vifg&gt;</td>
<td>Information about a Virtual Interface Group (VIFG)</td>
<td></td>
</tr>
</tbody>
</table>

Links

vifgs: create
POST http://{device}/api/npm.packet_capture/3.0/vifgs{?sort,is_other_vifg,limit,sortby,offset}

Request Body
Provide a vifg data object.

Response Body
Returns a vifg data object.
vifgs: get

GET http://{device}/api/npm.packet_capture/3.0/vifgs{?sort,is_other_vifg,limit,sortby,offset}

Response Body

Returns a vifgs data object.

Type: flow_export_filter

Filter settings used for Flow Export

```json
{
  "enabled": boolean,
  "filter": input_filter
}
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>flow_export_filter</td>
<td>&lt;object&gt;</td>
<td>Filter settings used for Flow Export</td>
<td>Required properties: [enabled, filter];</td>
</tr>
<tr>
<td>flow_export_filter.enabled</td>
<td>&lt;boolean&gt;</td>
<td>Enable or disable Flow Export filtering</td>
<td></td>
</tr>
<tr>
<td>flow_export_filter.filter</td>
<td>&lt;input_filter&gt;</td>
<td>Packet filter configuration</td>
<td></td>
</tr>
</tbody>
</table>

Type: input_filter

Packet filter configuration

```json
{
  "type": string,
  "value": string
}
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>input_filter</td>
<td>&lt;object&gt;</td>
<td>Packet filter configuration</td>
<td>Required properties: [type, value];</td>
</tr>
<tr>
<td>input_filter.type</td>
<td>&lt;string&gt;</td>
<td>The type of filter to be processed</td>
<td>Values: UNKNOWN, STEELFILTER, BPF;</td>
</tr>
<tr>
<td>input_filter.value</td>
<td>&lt;string&gt;</td>
<td>String representation of the filter</td>
<td></td>
</tr>
</tbody>
</table>

Type: job_indexing

Parameters for Microflow indexing

```json
{
  "enabled": boolean,
  "retention_rules": packet_retention
}
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>job_indexing</td>
<td>&lt;object&gt;</td>
<td>Parameters for Microflow indexing</td>
<td>Required properties: [enabled, retention_rules];</td>
</tr>
<tr>
<td>job_indexing.enabled</td>
<td>&lt;boolean&gt;</td>
<td>Enable or disable Microflow indexing on the capture job</td>
<td></td>
</tr>
<tr>
<td>job_indexing.retention_rules</td>
<td>&lt;packet_retention&gt;</td>
<td>Packet storage retention rules</td>
<td></td>
</tr>
</tbody>
</table>

Type: packet_broker_types_type_enum

Enumerative for supported packet brokers

```json

```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>packet_broker_types_type_enum</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Type: packet_retention

Packet storage retention rules

```json
{
  "max_disk_space": integer,
  "max_retention_time": string,
  "min_disk_space": integer,
  "min_retention_time": string
}
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>packet_retention</td>
<td>&lt;object&gt;</td>
<td>Packet storage retention rules</td>
<td></td>
</tr>
<tr>
<td>packet_retention.max_disk_space</td>
<td>&lt;integer&gt;</td>
<td>Maximum disk space for captured packets (i.e. the capture job cannot store more than N bytes worth of packets). Value in bytes. If equal to zero or not set, the parameter will be ignored</td>
<td>Optional;</td>
</tr>
<tr>
<td>packet_retention.max_retention_time</td>
<td>&lt;string&gt;</td>
<td>Maximum retention time for captured packets (i.e. the capture job cannot store more than N seconds worth of packets). The string represents a decimal value of seconds since epoch. If equal to zero or not set, the parameter will be ignored</td>
<td>Optional;</td>
</tr>
<tr>
<td>packet_retention.min_disk_space</td>
<td>&lt;integer&gt;</td>
<td>Minimum disk space for captured packets (i.e. best effort to have at least N bytes worth of packets in the capture job). Value in bytes. If equal to zero or not set, the parameter will be ignored</td>
<td>Optional;</td>
</tr>
<tr>
<td>packet_retention.min_retention_time</td>
<td>&lt;string&gt;</td>
<td>Minimum retention time for captured packets (i.e. best effort to have at least N seconds worth of packets in the capture job). The string represents a decimal value of seconds since epoch. If equal to zero or not set, the parameter will be ignored</td>
<td>Optional;</td>
</tr>
</tbody>
</table>

### Type: phys_interface_capabilities_enum

The types of supported speed/duplex configurations. AUTONEG_* values will try to autonegotiate the corresponding speed in Mbps (AUTNEG will negotiate them all). All other values will force a specific speed in Mbps (FD full duplex, HD half duplex)

```json
string
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>phys_interface_capabilities_enum</td>
<td>&lt;string&gt;</td>
<td>The types of supported speed/duplex configurations. AUTONEG_* values will try to autonegotiate the corresponding speed in Mbps (AUTNEG will negotiate them all). All other values will force a specific speed in Mbps (FD full duplex, HD half duplex)</td>
<td>Values: UNKNOWN, AUTONEG, AUTONEG_10, AUTONEG_100, AUTONEG_1000, 10_HD, 10_FD, 100_HD, 100_FD, 1000_FD, 40000_FD, 100000_FD;</td>
</tr>
</tbody>
</table>

### Type: recent_stats

Statistics about last second/minute/hour (and total)

```json
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>phys_interface_capabilities_enum</td>
<td>&lt;string&gt;</td>
<td>The types of supported speed/duplex configurations. AUTONEG_* values will try to autonegotiate the corresponding speed in Mbps (AUTNEG will negotiate them all). All other values will force a specific speed in Mbps (FD full duplex, HD half duplex)</td>
<td>Values: UNKNOWN, AUTONEG, AUTONEG_10, AUTONEG_100, AUTONEG_1000, 10_HD, 10_FD, 100_HD, 100_FD, 1000_FD, 40000_FD, 100000_FD;</td>
</tr>
</tbody>
</table>
```json
{
  "last_hour": integer,
  "last_minute": integer,
  "last_second": integer,
  "total": integer
}
```

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>recent_stats</td>
<td>&lt;object&gt;</td>
<td>Statistics about last second/minute/hour (and total)</td>
<td>Read-only; Required properties: [total];</td>
</tr>
<tr>
<td>recent_stats.last_hour</td>
<td>&lt;integer&gt;</td>
<td>The value of the statistics in the last hour</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>recent_stats.last_minute</td>
<td>&lt;integer&gt;</td>
<td>The value of the statistics in the last minute</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>recent_stats.last_second</td>
<td>&lt;integer&gt;</td>
<td>The value of the statistic in the last second</td>
<td>Read-only; Optional;</td>
</tr>
<tr>
<td>recent_stats.total</td>
<td>&lt;integer&gt;</td>
<td>Total number of the statistic</td>
<td>Read-only;</td>
</tr>
</tbody>
</table>