

Riverbed Cascade Shark REST API v5.0

Copyright © Riverbed Technology Inc. 2024

Created Jan 16, 2024 at 02:01 PM

Overview

This document describes the RESTful APIs exported by Cascade Shark products.

It is assumed that the reader has practical knowledge of RESTful APIs, so the documentation does not go into detail about what REST is and how to use it. Instead the documentation focuses on what data can be accessed or modified, how to access it, and how to encode requests and responses.

The remainder of this section lists the high level functionality exposed by the REST API and describes the data encodings for objects that are used to encode information for requests and responses.

The Resources section lists the supported REST resources and the methods supported on these resources. For each operation, the document describes what the operation does, the specific HTTP method and URL used, the data types used for requests and responses (if any) and any required or optional URL parameters.

The Data Types section describes commonly used data types in the REST API, including example encodings in both JSON and XML.

The Errors section lists the various error codes that may be returned from REST API operations.

Functionality

The Shark REST API provides programmable access to virtually all of the functionality implemented by the shark appliance, including:

- Applying views and obtaining view output
- Enumerating and examining packet data sources on the appliance (interfaces, capture jobs, trace clips, and files)
- Creating and managing trace clips
- Uploading and/or extracting packet data from the appliance
- Extracting and modifying system configuration, including user configuration, capture job management, basic system configuration, etc.
- Managing protocol definitions (port names, port groups, layer 4 mappings, and custom applications)
- Access system version information and apply system updates
- Managing interface settings, including name, description, tap type, etc.

NOTE: Resources and methods used for authentication to the shark appliance through the API, and other resources related to querying for system information are implemented by the [Riverbed Common REST API](#). Before accessing the Shark API, please familiarize yourself with the Common API documentation.

Data Encoding

Most resources exposed by the API support both XML and JSON encoding for requests and responses. The selection of the specific encoding is accomplished through the use of HTTP headers.

The Accept header should be included with all API requests, and it is used to control the encoding of the response body. To specify XML encoding, the header should be set to Accept: text/xml, and to specify JSON encoding, the header should be set to Accept: application/json. If the Accept header is omitted, the default encoding is XML.

The Content-Type header must be included with all PUT or POST requests that include a request body. To specify XML encoding, the header should be set to Content-Type: text/xml. To specify JSON encoding, the header should be set to Content-Type: application/json.

Some resources support alternative content types for requests and responses, as identified in the specific resource documentation below.

Resources

info: List supported file extensions

Get the list of Shark file extensions

GET https://{device}/api/shark/5.0/info/file_extensions

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```
[
  {
    "description": string,
    "value": string
  }
]
```

Example:

```
[
  {
    "description": "Endace ERF trace file",
    "value": "erf"
  },
  {
    "description": "Pcap trace file",
    "value": "cap"
  },
  {
    "description": "Pcap trace file",
    "value": "pcap"
  },
  {
    "description": "Pcap trace file",
    "value": "cap0"
  },
  {
    "description": "Pcap-ng trace file",
    "value": "pcapng"
  },
  {
    "description": "Pcap-ng trace file",
    "value": "ntar"
  },
  {
    "description": "Shark appliance trace file",
    "value": "svt"
  },
  {
    "description": "Virtual trace file",
    "value": "pvt"
  }
]
```

Property Name	Type	Description	Notes
<code>file_extensions</code>	<code><array of <object>></code>		
<code>file_extensions[file_extension]</code>	<code><object></code>		
<code>file_extensions[file_extension].description</code>	<code><string></code>	Description of this file extension	
<code>file_extensions[file_extension].value</code>	<code><string></code>	File extension value	

info: List supported tap types

Get the list of supported tap types

GET https://{device}/api/shark/5.0/info/tap_types

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```
[
  {
    "type_pretty": string,
    "type": string,
    "description": string
  }
]
```

Example:

```
[
  {
    "type": "NONE",
    "type_pretty": "Shark Internal",
    "description": "Timestamps applied by the shark itself based on the system clock. "
  },
  {
    "type": "CPACKET",
    "type_pretty": "cPacket",
    "description": "Timestamps applied by a cPacket cVU or cTap."
  },
  {
    "type": "GIGAMON_HEADER",
    "type_pretty": "Gigamon (Header)",
    "description": "Timestamps applied by a Gigamon SMT-436 with the SMT-TSP timestamp feature enabled, configured to store timestamps in the packet header."
  },
  {
    "type": "GIGAMON_TRAILER",
    "type_pretty": "Gigamon (Trailer)",
    "description": "Timestamps applied by a Gigamon SMT-436 with the SMT-TSP timestamp feature enabled, configured to store timestamps in the packet trailer."
  },
  {
    "type": "GIGAMON_TRAILER_X12",
    "type_pretty": "Gigamon (Trailer X12-TS)",
    "description": "Timestamps applied by a Gigamon GigaPORT-X12-TS, configured to store timestamps in the packet trailer."
  },
  {
    "type": "VSS",
    "type_pretty": "VSS (Timestamp only)",
    "description": "Timestamps applied by a VSS Monitoring Distributed Traffic Capture System (DTCS), configured to store only timestamps in the packet."
  }
]
```

Property Name	Type	Description	Notes
<code>tap_types</code>	<code><array of <object>></code>	List of supported tap types	
<code>tap_types[tap_type]</code>	<code><object></code>	Information describing a supported tap type	
<code>tap_types[tap_type].type_pretty</code>	<code><string></code>	User-friendly name for the specific type of tap	
<code>tap_types[tap_type].type</code>	<code><string></code>	The type code for the tap	Values: NONE, CPACKET, GIGAMON_HEADER, GIGAMON_TRAILER, GIGAMON_TRAILER_X12, VSS, VSS_PORT_ID, ANUE, ARISTA, UNKNOWN
<code>tap_types[tap_type].description</code>	<code><string></code>	Description of the specific type of tap	

info: Get job defaults

Get capture job default settings

```
GET https://{device}/api/shark/5.0/info/job_defaults
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```

{
  "index_size_limit": number,
  "index_size_pct": number,
  "retention_size_pct": number,
  "retention_size_limit": number,
  "snap_length": number,
  "job_name": string
}

```

Example:

```

{
  "index_size_limit": 128043712,
  "retention_size_limit": 12804371251,
  "snap_length": 65535,
  "index_size_pct": 0.427825,
  "retention_size_pct": 30.0,
  "job_name": "New Job 1"
}

```

Property Name	Type	Description	Notes
<i>job_defaults</i>	<object>	Default values for a new capture job	
<i>job_defaults.index_size_limit</i>	<number>	Default size limit (bytes) of index for new capture job	
<i>job_defaults.index_size_pct</i>	<number>	Default max percent of disk for index	
<i>job_defaults.retention_size_pct</i>	<number>	Default max percent of disk for retained capture job	
<i>job_defaults.retention_size_limit</i>	<number>	Default size limit (bytes) on retained capture job	
<i>job_defaults.snap_length</i>	<number>	Default snap length	
<i>job_defaults.job_name</i>	<string>	Default name of new job	

info: List mac vendors

Get the list of supported MAC vendors (NOTE: This is a long listing.)

```
GET https://{device}/api/shark/5.0/info/mac_vendors
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```

[
  {
    "code": string,
    "name": string
  }
]

```

Example:

```

[
  {
    "code": "00:00:00",
    "name": "00:00:00"
  },
  {
    "code": "00:00:01",
    "name": "Xerox"
  }
]

```

Property Name	Type	Description	Notes
<i>mac_vendors</i>	<array of <object>>	List of MAC vendor codes	
<i>mac_vendors[mac_vendor]</i>	<object>	Vendor information	
<i>mac_vendors[mac_vendor].code</i>	<string>	Vendor code	
<i>mac_vendors[mac_vendor].name</i>	<string>	Vendor name	

info: List timezones

Get the list of supported timezones

```
GET https://{device}/api/shark/5.0/info/timezones
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```
{
  "timezones": [
    string
  ],
  "selected": string
}
```

Example:

```
{
  "timezones": [
    "Africa/Abidjan",
    "Africa/Accra",
    "Africa/Addis_Ababa",
    "Africa/Algiers",
    "Africa/Asmara",
    "Africa/Bamako",
    "Africa/Bangui",
    "Africa/Banjul",
    "America/Kentucky/Louisville",
    "America/Kentucky/Monticello",
    "America/Kralendijk",
    "America/La_Paz",
    "America/Lima",
    "America/Los_Angeles",
    "America/Lower_Princes",
    "America/Maceio",
    "America/Managua",
    "America/Manaus",
    "America/Marigot",
    "America/Martinique"
  ],
  "selected": "America/Los_Angeles"
}
```

Property Name	Type	Description	Notes
<code>timezone_config</code>	<code><object></code>	Timezone information	
<code>timezone_config.timezones</code>	<code><array of <string>></code>	List of supported timezones	
<code>timezone_config.timezones[timezone]</code>	<code><string></code>		
<code>timezone_config.selected</code>	<code><string></code>	Currently selected timezone	

info: List supported data types

Get the list of supported Shark data types in views

```
GET https://{device}/api/shark/5.0/info/types
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```
[
  {
    "name": string,
    "calculations": [
```

```
string
]
}
]
```

Example:

```
[
{
  "name": "NONE",
  "calculations": [
    "NONE"
  ]
},
{
  "name": "PROTOCOL",
  "calculations": [
    "NONE"
  ]
},
{
  "name": "BOOLEAN",
  "calculations": [
    "NONE"
  ]
},
{
  "name": "UINT8",
  "calculations": [
    "NONE",
    "SUM",
    "MAX",
    "MIN",
    "AVG",
    "TIME_AVG"
  ]
},
{
  "name": "UINT16",
  "calculations": [
    "NONE",
    "SUM",
    "MAX",
    "MIN",
    "AVG",
    "TIME_AVG"
  ]
},
{
  "name": "UINT24",
  "calculations": [
    "NONE",
    "SUM",
    "MAX",
    "MIN",
    "AVG",
    "TIME_AVG"
  ]
},
{
  "name": "UINT32",
  "calculations": [
    "NONE",
    "SUM",
    "MAX",
    "MIN",
    "AVG",
    "TIME_AVG"
  ]
},
{
  "name": "UINT64",
  "calculations": [
    "NONE",
    "SUM",
    "MAX",
    "MIN",
    "AVG",
    "TIME_AVG"
  ]
},
{
  "name": "INT8",
  "calculations": [
    "NONE",
    "SUM",
    "MAX",
    "MIN",
```

```
"AVG",
"TIME_AVG"
]
},
{
"name": "INT16",
"calculations": [
"NONE",
"SUM",
"MAX",
"MIN",
"AVG",
"TIME_AVG"
]
},
{
"name": "INT24",
"calculations": [
"NONE",
"SUM",
"MAX",
"MIN",
"AVG",
"TIME_AVG"
]
},
{
"name": "INT32",
"calculations": [
"NONE",
"SUM",
"MAX",
"MIN",
"AVG",
"TIME_AVG"
]
},
{
"name": "INT64",
"calculations": [
"NONE",
"SUM",
"MAX",
"MIN",
"AVG",
"TIME_AVG"
]
},
{
"name": "FLOAT",
"calculations": [
"NONE",
"SUM",
"MAX",
"MIN",
"AVG",
"TIME_AVG"
]
},
{
"name": "DOUBLE",
"calculations": [
"NONE",
"SUM",
"MAX",
"MIN",
"AVG",
"TIME_AVG"
]
},
{
"name": "ABSOLUTE_TIME",
"calculations": [
"NONE",
"MAX",
"MIN"
]
},
{
"name": "RELATIVE_TIME",
"calculations": [
"NONE",
"SUM",
"MAX",
"MIN",
"AVG",
"TIME_AVG"
]
```



```
]
},
{
  "name": "STRING",
  "calculations": [
    "NONE"
  ]
},
{
  "name": "STRINGZ",
  "calculations": [
    "NONE"
  ]
},
{
  "name": "SHORT_STRING",
  "calculations": [
    "NONE"
  ]
},
{
  "name": "UINT_STRING",
  "calculations": [
    "NONE"
  ]
},
{
  "name": "ETHER",
  "calculations": [
    "NONE",
    "MAX",
    "MIN"
  ]
},
{
  "name": "BYTES",
  "calculations": [
    "NONE"
  ]
},
{
  "name": "UINT_BYTES",
  "calculations": [
    "NONE"
  ]
},
{
  "name": "IPv4",
  "calculations": [
    "NONE",
    "MAX",
    "MIN"
  ]
},
{
  "name": "IPv6",
  "calculations": [
    "NONE",
    "MAX",
    "MIN"
  ]
},
{
  "name": "UDP_PORT",
  "calculations": [
    "NONE",
    "MAX",
    "MIN"
  ]
},
{
  "name": "TCP_PORT",
  "calculations": [
    "NONE",
    "MAX",
    "MIN"
  ]
},
{
  "name": "IPXNET",
  "calculations": [
    "NONE",
    "MAX",
    "MIN"
  ]
},
{
  "name": "FRAGMENTUM"
```

```

"name": "FRAMENUM",
"calculations": [
  "NONE",
  "MAX",
  "MIN"
],
},
{
"name": "PCRE",
"calculations": [
  "NONE"
]
},
{
"name": "GUID",
"calculations": [
  "NONE",
  "MAX",
  "MIN"
]
},
{
"name": "OID",
"calculations": [
  "NONE",
  "MAX",
  "MIN"
]
},
{
"name": "NUM_TYPES",
"calculations": [
  "NONE"
]
},
{
"name": "INDEX",
"calculations": [
  "NONE",
  "MAX",
  "MIN"
]
},
{
"name": "EUI64",
"calculations": [
  "NONE"
]
}
]

```

Property Name	Type	Description	Notes
<i>types</i>	<i><array of <object>></i>	List of supported Shark types	
<i>types[type]</i>	<i><object></i>	Information for one Shark type	
<i>types[type].name</i>	<i><string></i>	Shark type ID	Values: NONE, PROTOCOL, BOOLEAN, UINT8, UINT16, UINT24, UINT32, UINT64, INT8, INT16, INT24, INT32, INT64, FLOAT, DOUBLE, ABSOLUTE_TIME, RELATIVE_TIME, STRING, STRINGZ, SHORT_STRING, UINT_STRING, ETHER, BYTES, UINT_BYTES, IPv4, IPv6, UDP_PORT, TCP_PORT, IPXNET, FRAMENUM, PCRE, GUID, OID, NUM_TYPES, INDEX, EUI64
<i>types[type].calculations</i>	<i><array of <string>></i>	List of Shark calculations	
<i>types[type].calculations[calculation]</i>	<i><string></i>	Calculation type	Values: NONE, SUM, MAX, MIN, AVG, TIME_AVG

info: List supported extractor fields

Get the list of supported Shark view extractor fields

```
GET https://{device}/api/shark/5.0/info/fields
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```
[
  {
    "index": boolean,
    "group": string,
    "description": string,
    "dimension": boolean,
    "multi_segment": boolean,
    "index_calculations": [
      string
    ],
    "display_type": string,
    "type": string,
    "id": string,
    "name": string
  }
]
```

Example:

```
[
  {
    "group": "arp",
    "description": "Byte count of ARP packets",
    "display_type": "DEC",
    "type": "UINT64",
    "id": "arp.bytes",
    "name": "ARP Bytes"
  },
  {
    "group": "cifs",
    "description": "Indication of whether the current packet contains CIFS traffic",
    "display_type": "DEC",
    "type": "BOOLEAN",
    "id": "cifs.is_cifs",
    "name": "CIFS"
  }
]
```

Property Name	Type	Description	Notes
<i>fields</i>	<array of <object>>		
<i>fields</i> [field]	<object>		
<i>fields</i> [field].index	<boolean>	Whether or not this field is supported by the index	Optional
<i>fields</i> [field].group	<string>	Group in which the field belongs	
<i>fields</i> [field].description	<string>	Description of this field	Optional
<i>fields</i> [field].dimension	<boolean>	Whether or not the field is a dimension	Optional
<i>fields</i> [field].multi_segment	<boolean>	Whether or not the field is used for multi-segment sources	Optional
<i>fields</i> [field].index_calculations	<array of <string>>	List of calculations on this field that are supported by the index	Optional
<i>fields</i> [field].index_calculations [index_calculation]	<string>	Calculation type	Values: NONE, SUM, MAX, MIN, AVG, TIME_AVG
<i>fields</i> [field].display_type	<string>	Display information for a numeric field	Optional; Values: NONE, DEC, HEX, OCT, DEC_HEX, HEX_DEC, PERC
<i>fields</i> [field].type	<string>	Type of the field	Values: NONE, PROTOCOL, BOOLEAN, UINT8, UINT16, UINT24, UINT32, UINT64, INT8, INT16, INT24, INT32, INT64, FLOAT, DOUBLE, ABSOLUTE_TIME, RELATIVE_TIME, STRING, STRINGZ, SHORT_STRING, UINT_STRING, ETHER, BYTES, UINT_BYTES, IPv4, IPv6, UDP_PORT, TCP_PORT, IPXNET, FRAMENUM, PCRE, GUID, OID, NUM_TYPES, INDEX, EUI64
<i>fields</i> [field].id	<string>	Identifier of the field	
<i>fields</i> [field].name	<string>	User-friendly name of the field	

users / groups: Delete user

Delete local user

```
DELETE https://{device}/api/shark/5.0/auth/users/{user_id}
```

Authorization

This request requires authorization.

Response Body

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

users / groups: List users

Get the list of local users

```
GET https://{device}/api/shark/5.0/auth/users
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```
[ user ]  
Example:  
[  
  {  
    "is_locked": false,  
    "can_be_locked": false,  
    "is_admin": true,  
    "name": "admin",  
    "groups": [  
      "Administrators"  
    ]  
  },  
  {  
    "is_locked": false,  
    "can_be_locked": false,  
    "is_admin": false,  
    "name": "normaluser",  
    "groups": [  
      "NormalUsers"  
    ]  
  }  
]
```

Property Name	Type	Description	Notes
<i>users</i>	<array of <user>>	List of users	
<i>users</i> [<i>user</i>]	<user>	Instance of a <user>	

users / groups: Update user locked state

Update locked status of user [USER_ID]

```
PUT https://{device}/api/shark/5.0/auth/users/{user_id}/locked
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>user_id</i>	<string>	User identifier	

Request Body

Provide a request body with the following structure:

JSON

```
{
  "value": boolean
}
```

Example:

```
{
  "value": false
}
```

Property Name	Type	Description	Notes
<i>locked</i>	< <i>object</i> >	Unlock a locked user	
<i>locked.value</i>	< <i>boolean</i> >	'false' to unlock a locked user. 'true' value not supported as you cannot lock an unlocked user.	

Response Body

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

users / groups: Update user password

Update password for local user

```
PUT https://{device}/api/shark/5.0/auth/users/{user_id}
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>user_id</i>	< <i>string</i> >	User identifier	

Request Body

Provide a request body with the following structure:

JSON

```
{
  "existing_password": string,
  "new_password": string
}
```

Example:

```
{
  "existing_password": "old-password",
  "new_password": "new-password"
}
```

Property Name	Type	Description	Notes
<i>password</i>	< <i>object</i> >	Updates user password	
<i>password.existing_password</i>	< <i>string</i> >	Existing password	Optional
<i>password.new_password</i>	< <i>string</i> >	New password	

Response Body

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

users / groups: Get group detail

Retrieve a user group

```
GET https://{device}/api/shark/5.0/auth/groups/{group_id}
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
---------------	------	-------------	-------

<i>group_id</i>	<string>	Group identifier	
-----------------	----------	------------------	--

Response Body

Returns a *group* data object.

users / groups: List groups

Get the list of local user groups defined for this Shark

GET https://{device}/api/shark/5.0/auth/groups

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

[*group*]

Example:

```
[
  {
    "name": "Administrators",
    "capabilities": [
      "CAPABILITY_ADMINISTRATOR"
    ],
    "description": "Administrators"
  },
  {
    "name": "NormalUsers",
    "capabilities": [
      "CAPABILITY_APPLY_VIEWS_ON_FILES",
      "CAPABILITY_APPLY_VIEWS_ON_INTERFACES",
      "CAPABILITY_SHARE_VIEWS",
      "CAPABILITY_CREATE_FILES",
      "CAPABILITY_IMPORT_FILES",
      "CAPABILITY_EXPORT_FILES",
      "CAPABILITY_SCHEDULE_WATCHES",
      "CAPABILITY_ACCESS_PROBE_FILES"
    ],
    "description": "Normal unprivileged users"
  }
]
```

Property Name	Type	Description	Notes
<i>groups</i>	<array of <group>>	List of groups	
<i>groups</i> [group]	<group>	Instance of a <group>	

users / groups: Delete group

Delete an existing user group

DELETE https://{device}/api/shark/5.0/auth/groups/{group_id}

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>group_id</i>	<string>	Group identifier	

Response Body

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

users / groups: Get users detail

users / groups: Get user details

Get info on local user

```
GET https://{device}/api/shark/5.0/auth/users/{user_id}
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>user_id</i>	<string>	User identifier	

Response Body

Returns a *user* data object.

users / groups: Create group

Create a new local user group

```
POST https://{device}/api/shark/5.0/auth/groups
```

Authorization

This request requires authorization.

Request Body

Provide a *group* data object.

Response Body

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

users / groups: Create user

Create new local user

```
POST https://{device}/api/shark/5.0/auth/users
```

Authorization

This request requires authorization.

Request Body

Provide a request body with the following structure:

JSON

```
{
  "can_be_locked": boolean,
  "password": string,
  "name": string,
  "groups": [
    string
  ]
}
```

Example:

```
{
  "can_be_locked": true,
  "password": "testing",
  "name": "test",
  "groups": [
    "NormalUsers",
    "Viewers"
  ]
}
```

Property Name	Type	Description	Notes
<i>user</i>	<object>	Information to create a new user	

<code>user.can_be_locked</code>	<code><boolean></code>	'true' if user can get locked, 'false' otherwise	
<code>user.password</code>	<code><string></code>	User password	
<code>user.name</code>	<code><string></code>	User name	
<code>user.groups</code>	<code><array of <string>></code>	List of groups of which the user is a member	
<code>user.groups[group]</code>	<code><string></code>		

Response Body

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

jobs: Delete job

Delete capture job

```
DELETE https://{device}/api/shark/5.0/jobs/{job_id}
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<code>job_id</code>	<code><string></code>	Job identifier	

Response Body

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

jobs: Get job information

Get information (status and config) for a capture job

```
GET https://{device}/api/shark/5.0/jobs/{job_id}
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<code>job_id</code>	<code><string></code>	Job identifier	

Response Body

On success, the server returns a response body with the following structure:

```
JSON
```



```

{
  "status": job\_status,
  "index": job\_index\_info,
  "config": job\_config,
  "id": string
}

```

Example:

```

{
  "status": {
    "packet_end_time": 1345512749000000000,
    "state": "STOPPED",
    "packet_start_time": 1344456875000000000,
    "packet_size": 44781772
  },
  "index": {
    "status": "RUNNING",
    "start_time": 1344456875000000000,
    "end_time": 1345512749000000000,
    "size": 52348800
  },
  "config": {
    "packet_retention": {
      "size_limit": 5368709120
    },
    "name": "New Job 1",
    "indexing": {
      "synced": false,
      "size_limit": 52428800,
      "dpi_enabled": true,
      "time_limit": 604800
    },
    "interface_description": "mon0",
    "snap_length": 65535,
    "interface_name": "mon0"
  },
  "id": "00000001"
}

```

Property Name	Type	Description	Notes
<i>job</i>	<object>	A capture job	
<i>job.status</i>	< job_status >	Status information for this job	
<i>job.index</i>	< job_index_info >	Index information for this job	
<i>job.config</i>	< job_config >	Configuration information for this job	
<i>job.id</i>	<string>	Job ID	

jobs: Update job status

Update running status of capture job

```
PUT https://{device}/api/shark/5.0/jobs/{job_id}/status
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>job_id</i>	<string>	Job identifier	

Request Body

Provide a request body with the following structure:

JSON

```
{
  "clear_packets": boolean,
  "state": string
}
```

Example:

```
{
  "clear_packets": true,
  "state": "STOPPED"
}
```

Property Name	Type	Description	Notes
<i>status</i>	< <i>object</i> >	Update job state, optionally clear packets for job	
<i>status.clear_packets</i>	< <i>boolean</i> >	'true' to clear packets for this job	Optional
<i>status.state</i>	< <i>string</i> >	Running state of a capture job	Values: ACTIVE, RUNNING, STOPPED, UNKNOWN

Response Body

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

jobs: Get job status

Get status information for a capture job

```
GET https://{device}/api/shark/5.0/jobs/{job_id}/status
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>job_id</i>	< <i>string</i> >	Job identifier	

Response Body

Returns a *job_status* data object.

jobs: List jobs

Get the list of configured capture jobs

```
GET https://{device}/api/shark/5.0/jobs
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

```
JSON
```

```
[
  {
    "status": job_status,
    "index": job_index_info,
    "config": job_config,
    "id": string
  }
]
```

Example:

```
[
  {
    "status": {
      "packet_end_time": 1345512749,
      "state": "STOPPED",
      "packet_start_time": 1344456875,
      "packet_size": 44781772
    },
    "config": {
      "snap_length": 65535,
      "interface_name": "mon0",
      "packet_retention": {
        "size_limit": 5368709120
      },
      "name": "New Job 1",
      "interface_description": "mon0"
    },
    "id": "00000001"
  }
]
```

Property Name	Type	Description	Notes
<i>jobs</i>	<array of <object>>	List of capture jobs	
<i>jobs</i> [<i>job</i>]	<object>	A capture job	
<i>jobs</i> [<i>job</i>].status	< <i>job_status</i> >	Status information for this job	
<i>jobs</i> [<i>job</i>].index	< <i>job_index_info</i> >	Index information for this job	
<i>jobs</i> [<i>job</i>].config	< <i>job_config</i> >	Configuration information for this job	
<i>jobs</i> [<i>job</i>].id	< <i>string</i> >	Job ID	

jobs: Get job config

Get configuration for capture job

```
GET https://{device}/api/shark/5.0/jobs/{job_id}/config
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>job_id</i>	< <i>string</i> >	Job identifier	

Response Body

Returns a *job_config* data object.

jobs: Get job index status

Index information for capture job.

```
GET https://{device}/api/shark/5.0/jobs/{job_id}/index
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>job_id</i>	< <i>string</i> >	Job identifier	

Response Body

Returns a [job_index_info](#) data object.

jobs: Update job configuration

Update configuration of a capture job

```
PUT https://{device}/api/shark/5.0/jobs/{job_id}
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>job_id</i>	<i><string></i>	Job identifier	

Request Body

Provide a [job_config](#) data object.

Response Body

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

jobs: Get job stats

Statistics for a capture job

```
GET https://{device}/api/shark/5.0/jobs/{job_id}/stats
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>job_id</i>	<i><string></i>	Job identifier	

Response Body

On success, the server returns a response body with the following structure:

```
JSON
```

```

{
  "packets_dropped": {
    "last_minute": number,
    "last_hour": number,
    "total": number,
    "last_second": number
  },
  "packets_written": {
    "last_minute": number,
    "last_hour": number,
    "total": number,
    "last_second": number
  }
}

```

Example:

```

{
  "packets_dropped": {
    "last_minute": 0,
    "last_second": 0,
    "total": 0,
    "last_hour": 0
  },
  "packets_written": {
    "last_minute": 1815,
    "last_second": 0,
    "total": 123387,
    "last_hour": 3019
  }
}

```

Property Name	Type	Description	Notes
<i>job_stats</i>	<object>	Capture job statistics	
<i>job_stats.packets_dropped</i>	<object>	Statistics for the number of packets that arrived at the capture port but could not be written successfully to the packet storage	
<i>job_stats.packets_dropped.last_minute</i>	<number>	Number of packets in the last minute	
<i>job_stats.packets_dropped.last_hour</i>	<number>	Number of packets in the last hour	
<i>job_stats.packets_dropped.total</i>	<number>	Total number of packets since the job was started	
<i>job_stats.packets_dropped.last_second</i>	<number>	Number of packets in the last second	
<i>job_stats.packets_written</i>	<object>	Statistics for the number of packets successfully written to the packet storage	
<i>job_stats.packets_written.last_minute</i>	<number>	Number of packets in the last minute	
<i>job_stats.packets_written.last_hour</i>	<number>	Number of packets in the last hour	
<i>job_stats.packets_written.total</i>	<number>	Total number of packets since the job was started	
<i>job_stats.packets_written.last_second</i>	<number>	Number of packets in the last second	

jobs: Create job

Create a new capture job

POST <https://{device}/api/shark/5.0/jobs>

Authorization

This request requires authorization.

Request Body

Provide a *job_config* data object.

Response Body

On success, the server returns a response body with the following structure:

JSON

```

{
  "id": string
}

Example:
{
  "id": "00000001"
}

```

Property Name	Type	Description	Notes
<i>job</i>	<object>	Information for a new job	
<i>job.id</i>	<string>	Job id	

packet export: Get job export packets

Get the packet stream for an export operation.

```
GET https://{device}/api/shark/5.0/{source_type}/{source_id}/exports/{export_id}/packets
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>source_id</i>	<string>	Specific source identifier of type {source_type}. For example, if source_type is "jobs", then the {source_id} is the job identifier.	
<i>source_type</i>	<string>	Packet source type identifier. Must be one of "interfaces", "jobs", "clips", or "fs".	
<i>export_id</i>	<string>	Export operation identifier.	

Response Body

On success, the server returns a request body containing data with content type application/vnd.tcpdump.pcap.

packet export: List export operations

Get the list of active export operations from the given source.

```
GET https://{device}/api/shark/5.0/{source_type}/{source_id}/exports
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>source_id</i>	<string>	Specific source identifier of type {source_type}. For example, if source_type is "jobs", then the {source_id} is the job identifier.	
<i>source_type</i>	<string>	Packet source type identifier. Must be one of "interfaces", "jobs", "clips", or "fs".	

Response Body

On success, the server returns a response body with the following structure:

JSON

[[export](#)]

Example:

```
[
  {
    "status": {
      "owner": "admin",
      "bytes_approx": 855784,
      "state": "RUNNING",
      "creation_time": 1364334117658433000
    },
    "config": {
      "output_format": "PCAP_US",
      "start_time": 1364230933,
      "end_time": 1364317200
    },
    "id": "000193E1"
  }
]
```

Property Name	Type	Description	Notes
<i>exports</i>	<array of <export>>	List of exports currently under way	
<i>exports[export]</i>	<export>	Instance of an <export>	

packet export: Stop export operation

Stop an export operation

```
DELETE https://{device}/api/shark/5.0/{source_type}/{source_id}/exports/{export_id}
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>source_id</i>	<string>	Specific source identifier of type {source_type} . For example, if source_type is "jobs", then the {source_id} is the job identifier.	
<i>source_type</i>	<string>	Packet source type identifier. Must be one of "interfaces", "jobs", "clips", or "fs".	
<i>export_id</i>	<string>	Export operation identifier.	

Response Body

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

packet export: Download job packets

Export packets from a capture job. Response content type is 'application/vnd.tcpdump.pcap'.

```
GET https://{device}/api/shark/5.0/{source_type}/{source_id}/packets?file_format={string}&seconds={number}&bytes={number}&filename={string}
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>file_format</i>	<string>	Format of output file: 'PCAP_US' for PCAP format (microsecond resolution); 'PCAP_NS' for PCAP format (nanosecond resolution); 'PCAPNG_US' for PCAP-NG format (microsecond resolution); or 'PCAPNG_NS' for PCAP-NG format (nanosecond resolution).	Optional
<i>seconds</i>	<number>	Limit on total time (in seconds) of packet extraction.	Optional
<i>packets</i>	<number>	Limit on number of packets to be extracted.	Optional
<i>bytes</i>	<number>	Limit on number of bytes to be extracted.	Optional

<i>filename</i>	<string>	Name of output filename. This will appear in the 'content-disposition' header of the response.	Optional
<i>source_type</i>	<string>	Packet source type identifier. Must be one of "interfaces", "jobs", "clips", or "fs".	
<i>source_id</i>	<string>	Specific source identifier of type {source_type}. For example, if source_type is "jobs", then the {source_id} is the job identifier.	

Response Body

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

packet export: Get export operation status

Get status of an export operation

```
GET https://{device}/api/shark/5.0/{source_type}/{source_id}/exports/{export_id}
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>source_id</i>	<string>	Specific source identifier of type {source_type}. For example, if source_type is "jobs", then the {source_id} is the job identifier.	
<i>source_type</i>	<string>	Packet source type identifier. Must be one of "interfaces", "jobs", "clips", or "fs".	
<i>export_id</i>	<string>	Export operation identifier.	

Response Body

Returns an *export* data object.

packet export: Start export operation

Create a new export operation from the given source. This begins the process of extracting packets from the given source and returns a handle through which the caller can obtain status on the operation as well as download the packets themselves.

```
POST https://{device}/api/shark/5.0/{source_type}/{source_id}/exports
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>source_id</i>	<string>	Specific source identifier of type {source_type}. For example, if source_type is "jobs", then the {source_id} is the job identifier.	
<i>source_type</i>	<string>	Packet source type identifier. Must be one of "interfaces", "jobs", "clips", or "fs".	

Request Body

Provide an *export_config* data object.

Response Body

On success, the server returns a response body with the following structure:

JSON

```
{
  "id": string
}
```

Example:

```
{
  "id": "000193E1"
}
```


Property Name	Type	Description	Notes
<i>export_id</i>	<object>		
<i>export_id.id</i>	<string>	ID of created export	

interfaces: Update interface settings

Update information on capture interface {interface_id}.

PUT https://{device}/api/shark/5.0/interfaces/{interface_id}

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>interface_id</i>	<string>	Interface identifier	

Request Body

Provide a request body with the following structure:

JSON

```
{
  "tap_type": string,
  "name": string,
  "pass_thru": string,
  "dedup_status": string,
  "speed_options": [
    {
      "status": string,
      "speed_mbps": string,
      "duplex_type": string
    }
  ],
  "board_speed": {
    "status": string,
    "speed_mbps": string,
    "duplex_type": string
  },
  "description": string
}
```

Example:

```
{
  "dedup_status": "ENABLED",
  "tap_type": "GIGAMON_HEADER",
  "speed_options": [
    {
      "speed_mbps": "MBPS_10",
      "duplex_type": "HALF"
    },
    {
      "speed_mbps": "MBPS_10",
      "duplex_type": "FULL"
    },
    {
      "speed_mbps": "MBPS_100",
      "duplex_type": "HALF"
    },
    {
      "speed_mbps": "MBPS_100",
      "duplex_type": "FULL"
    },
    {
      "speed_mbps": "MBPS_1000",
      "duplex_type": "FULL"
    }
  ]
}
```

Property Name	Type	Description	Notes
<i>interface_settings</i>	<object>	Update information for a Shark physical interface. Note: If new passthru mode setting is present, all other settings are ignored.	

<code>interface_settings.tap_type</code>	<code><string></code>	New tap type setting	Optional; Values: NONE, CPACKET, GIGAMON_HEADER, GIGAMON_TRAILER, GIGAMON_TRAILER_X12, VSS, VSS_PORT_ID, ANUE, ARISTA, UNKNOWN
<code>interface_settings.name</code>	<code><string></code>	New alias for this interface	Optional
<code>interface_settings.pass_thru</code>	<code><string></code>	New passthru mode status	Optional; Values: ENABLED, DISABLED, NOT_SUPPORTED
<code>interface_settings.dedup_status</code>	<code><string></code>	New packet deduplication setting	Optional; Values: ENABLED, DISABLED, NOT_SUPPORTED
<code>interface_settings.speed_options</code>	<code><array of <object>></code>	List of link speed options	Optional
<code>interface_settings.speed_options [link_speed_option]</code>	<code><object></code>	Speed, duplex type, and status of a speed option	
<code>interface_settings.speed_options [link_speed_option].status</code>	<code><string></code>	Status of this link speed option for this interface	Optional; Values: SUPPORTED, ENABLED, NEGOTIATED
<code>interface_settings.speed_options [link_speed_option].speed_mbps</code>	<code><string></code>	Throughput for this speed option	Values: MBPS_10, MBPS_100, MBPS_1000, MBPS_10000
<code>interface_settings.speed_options [link_speed_option].duplex_type</code>	<code><string></code>	Duplex type for this speed option	Values: HALF, FULL, UNKNOWN
<code>interface_settings.board_speed</code>	<code><object></code>	Speed, duplex type, and status of a speed option	Optional
<code>interface_settings.board_speed.status</code>	<code><string></code>	Status of this link speed option for this interface	Optional; Values: SUPPORTED, ENABLED, NEGOTIATED
<code>interface_settings.board_speed.speed_mbps</code>	<code><string></code>	Throughput for this speed option	Values: MBPS_10, MBPS_100, MBPS_1000, MBPS_10000
<code>interface_settings.board_speed.duplex_type</code>	<code><string></code>	Duplex type for this speed option	Values: HALF, FULL, UNKNOWN
<code>interface_settings.description</code>	<code><string></code>	New description string for this interface	Optional

Response Body

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

interfaces: Update interface blink status

Request update of interface blink status.

```
PUT https://{device}/api/shark/5.0/interfaces/{interface_id}/blink_status
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<code>interface_id</code>	<code><string></code>	Interface identifier	

Request Body

Provide a request body with the following structure:

JSON

```
{
  "blink_status": string
}
```

Example:

```
{
  "blink_status": "ON"
}
```

Property Name	Type	Description	Notes
<code>blink_settings</code>	<code><object></code>	Update interface 'blink' status	
<code>blink_settings.blink_status</code>	<code><string></code>	New 'blink' status for this interface	Values: ON, OFF, UNKNOWN

Response Body

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

interfaces: Get interface info

Get information on capture interface {interface_id}.

```
GET https://{device}/api/shark/5.0/interfaces/{interface_id}
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>interface_id</i>	<i><string></i>	Interface identifier	

Response Body

Returns an *interface* data object.

interfaces: List interfaces

Get the list of capture interfaces

```
GET https://{device}/api/shark/5.0/interfaces?filter={string}
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>filter</i>	<i><string></i>	'device' to limit list to physical devices; 'virtual' to limit list to virtual files; 'aggregating' to limit list to aggregating ports.	Optional

Response Body

On success, the server returns a response body with the following structure:

JSON

```
[ interface ]
```

Example:

```
[  
  {  
    "interface_components": [],  
    "description": "TurboCap 1Gb device no.0",  
    "link": {  
      "status": "UP",  
      "tap_type": "NONE",  
      "stats": {  
        "bytes_rx": 73478815,  
        "packets_rx": 1007752  
      }  
    },  
    "dedup_status": "DISABLED",  
    "speed_options": [  
      {  
        "status": "ENABLED",  
        "speed_mbps": "MBPS_10",  
        "duplex_type": "FULL"  
      },  
      {  
        "status": "ENABLED",  
        "speed_mbps": "MBPS_10",  
        "duplex_type": "HALF"  
      },  
      {  
        "status": "ENABLED",  
        "speed_mbps": "MBPS_100",  
        "duplex_type": "FULL"  
      },  
      {  
        "status": "ENABLED",  
        "speed_mbps": "MBPS_100",  
        "duplex_type": "HALF"  
      },  
      {  
        "status": "NEGOTIATED",  
        "speed_mbps": "MBPS_1000",  
        "duplex_type": "FULL"  
      }  
    ]  
  }  
]
```

```
    },
    ],
    "mac_address": "00:e0:ed:1e:9d:1a",
    "blink_status": "OFF",
    "type": "EN10MB"
  },
  "board": {
    "pass_thru": "DISABLED",
    "type": "1G_COPPER",
    "name": "TurboCap 1 Gigabit Ethernet Board (00:e0:ed:1e:9d:1a)"
  },
  "is_promiscuous_mode": true,
  "type": "TURBOCAP_ADAPTER",
  "id": "tc0",
  "name": "tc0"
},
{
  "interface_components": [],
  "description": "TurboCap 1Gb device no.1",
  "link": {
    "status": "DOWN",
    "tap_type": "NONE",
    "stats": {
      "bytes_rx": 0,
      "packets_rx": 0
    },
    "dedup_status": "DISABLED",
    "speed_options": [
      {
        "status": "ENABLED",
        "speed_mbps": "MBPS_10",
        "duplex_type": "FULL"
      },
      {
        "status": "ENABLED",
        "speed_mbps": "MBPS_10",
        "duplex_type": "HALF"
      },
      {
        "status": "ENABLED",
        "speed_mbps": "MBPS_100",
        "duplex_type": "FULL"
      },
      {
        "status": "ENABLED",
        "speed_mbps": "MBPS_100",
        "duplex_type": "HALF"
      },
      {
        "status": "ENABLED",
        "speed_mbps": "MBPS_1000",
        "duplex_type": "FULL"
      }
    ],
    ],
    "mac_address": "00:e0:ed:1e:9d:1b",
    "blink_status": "OFF",
    "type": "EN10MB"
  },
  "board": {
    "pass_thru": "DISABLED",
    "type": "1G_COPPER",
    "name": "TurboCap 1 Gigabit Ethernet Board (00:e0:ed:1e:9d:1a)"
  },
  "is_promiscuous_mode": true,
  "type": "TURBOCAP_ADAPTER",
  "id": "tc1",
  "name": "tc1"
},
{
  "interface_components": [],
  "description": "TurboCap 1Gb device no.2",
  "link": {
    "status": "UP",
    "tap_type": "NONE",
    "stats": {
      "bytes_rx": 0,
      "packets_rx": 0
    },
    "dedup_status": "DISABLED",
    "speed_options": [
      {
        "status": "ENABLED",
        "speed_mbps": "MBPS_10",
        "duplex_type": "FULL"
      },
      {
        "status": "ENABLED",
        "speed_mbps": "MBPS_10"
```

```
    "speed_mbps": "MBPS_10",
    "duplex_type": "HALF"
  },
  {
    "status": "ENABLED",
    "speed_mbps": "MBPS_100",
    "duplex_type": "FULL"
  },
  {
    "status": "ENABLED",
    "speed_mbps": "MBPS_100",
    "duplex_type": "HALF"
  },
  {
    "status": "NEGOTIATED",
    "speed_mbps": "MBPS_1000",
    "duplex_type": "FULL"
  }
],
"mac_address": "00:e0:ed:1e:9d:1c",
"blink_status": "OFF",
"type": "EN10MB"
},
"board": {
  "pass_thru": "DISABLED",
  "type": "1G_COPPER",
  "name": "TurboCap 1 Gigabit Ethernet Board (00:e0:ed:1e:9d:1c)"
},
"is_promiscuous_mode": true,
"type": "TURBOCAP_ADAPTER",
"id": "tc2",
"name": "tc2"
},
{
  "interface_components": [],
  "description": "TurboCap 1Gb device no.3",
  "link": {
    "status": "UP",
    "tap_type": "NONE",
    "stats": {
      "bytes_rx": 0,
      "packets_rx": 0
    }
  },
  "dedup_status": "DISABLED",
  "speed_options": [
    {
      "status": "ENABLED",
      "speed_mbps": "MBPS_10",
      "duplex_type": "FULL"
    },
    {
      "status": "ENABLED",
      "speed_mbps": "MBPS_10",
      "duplex_type": "HALF"
    },
    {
      "status": "ENABLED",
      "speed_mbps": "MBPS_100",
      "duplex_type": "FULL"
    },
    {
      "status": "ENABLED",
      "speed_mbps": "MBPS_100",
      "duplex_type": "HALF"
    },
    {
      "status": "NEGOTIATED",
      "speed_mbps": "MBPS_1000",
      "duplex_type": "FULL"
    }
  ],
  "mac_address": "00:e0:ed:1e:9d:1d",
  "blink_status": "OFF",
  "type": "EN10MB"
},
"board": {
  "pass_thru": "DISABLED",
  "type": "1G_COPPER",
  "name": "TurboCap 1 Gigabit Ethernet Board (00:e0:ed:1e:9d:1c)"
},
"is_promiscuous_mode": true,
"type": "TURBOCAP_ADAPTER",
"id": "tc3",
"name": "tc3"
},
{
  "interface_components": [
    "tc2"
```

```

    "tc3"
  ],
  "description": "TurboCap Board Aggregating Port",
  "board": {
    "pass_thru": "DISABLED",
    "type": "1G_COPPER",
    "name": "TurboCap 1 Gigabit Ethernet Board (00:e0:ed:1e:9d:1c)"
  },
  "is_promiscuous_mode": true,
  "type": "BOARD_AGGREGATING",
  "id": "tc_bap_00e0ed1e9d1c",
  "name": "tc_bap_00e0ed1e9d1c"
},
{
  "interface_components": [
    "tc0",
    "tc1"
  ],
  "description": "TurboCap Board Aggregating Port (2)",
  "board": {
    "pass_thru": "DISABLED",
    "type": "1G_COPPER",
    "name": "TurboCap 1 Gigabit Ethernet Board (00:e0:ed:1e:9d:1a)"
  },
  "is_promiscuous_mode": true,
  "type": "BOARD_AGGREGATING",
  "id": "tc_bap_00e0ed1e9d1a",
  "name": "tc_bap_00e0ed1e9d1a"
},
{
  "interface_components": [
    "tc0",
    "tc1",
    "tc2",
    "tc3"
  ],
  "description": "TurboCap Aggregating Port",
  "is_promiscuous_mode": true,
  "type": "AGGREGATING",
  "id": "tc_tcap",
  "name": "tc_tcap"
}
]

```

Property Name	Type	Description	Notes
<i>interfaces</i>	<array of <interface>>	List of interfaces	
<i>interfaces</i> [interface]	<interface>	Instance of an <interface>	

views: Get view acl

Get the access control list for running view {view_id}.

```
GET https://{device}/api/shark/5.0/views/{view_id}/acl
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```

{
  "users": [
    {
      "owner": boolean,
      "name": string
    }
  ],
  "groups": [
    string
  ]
}

```

Example:

```

{
  "users": [
    {
      "owner": true,
      "name": "admin"
    }
  ],
  "groups": []
}

```

Property Name	Type	Description	Notes
<i>acl</i>	<i><object></i>	Access Control List	
<i>acl.users</i>	<i><array of <object>></i>	Users in the access control list	
<i>acl.users[user]</i>	<i><object></i>	User in the access list	
<i>acl.users[user].owner</i>	<i><boolean></i>	True if the user is the owner of the view	
<i>acl.users[user].name</i>	<i><string></i>	User name	
<i>acl.groups</i>	<i><array of <string>></i>	Groups in the access control list	
<i>acl.groups[group]</i>	<i><string></i>		

views: Unlock view

Unlock view {view_id}.

```
POST https://{device}/api/shark/5.0/views/{view_id}/unlock
```

Authorization

This request requires authorization.

Request Body

Do not provide a request body.

Response Body

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

views: Get view statistics

Get processing statistics for view {view_id}.

```
GET https://{device}/api/shark/5.0/views/{view_id}/stats
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

```
JSON
```

```

{
  "locked": boolean,
  "data_source_type": string,
  "state": string,
  "input_size": number,
  "time_details": {
    "start": timestamp-hp,
    "end": timestamp-hp,
    "delta": number
  },
  "processed_size": number
}

```

Example:

```

{
  "locked": false,
  "data_source_type": "PACKETS",
  "state": "DONE",
  "input_size": 190654505,
  "time_details": {
    "start": 1195590481719742000,
    "end": 1195590918719742000,
    "delta": 1000000000
  },
  "processed_size": 190654505
}

```

Property Name	Type	Description	Notes
<i>stats</i>	< <i>object</i> >	View statistics	
<i>stats.locked</i>	< <i>boolean</i> >	True if the view is locked	
<i>stats.data_source_type</i>	< <i>string</i> >	Data source type	Values: INDEX, PACKETS
<i>stats.state</i>	< <i>string</i> >	Handle state	Values: UNINITIALIZED, LOADED, PARAMS_LOADED, INITIALIZED, READY, RUNNING, ERRORS, DONE, CLOSING, PAUSED
<i>stats.input_size</i>	< <i>number</i> >	Size (in bytes) of the input source to process	
<i>stats.time_details</i>	< <i>object</i> >	Time details	
<i>stats.time_details.start</i>	< <i>timestamp-hp</i> >	Output start time. Can be 0 if the output has no data.	
<i>stats.time_details.end</i>	< <i>timestamp-hp</i> >	Output end time. Can be 0 if the output has no data.	
<i>stats.time_details.delta</i>	< <i>number</i> >	Output sampling rate	
<i>stats.processed_size</i>	< <i>number</i> >	Size (in bytes) of the input source currently processed	

views: Get view output legend

Get data legend for the output {output_id} in view {view_id}.

```
GET https://{device}/api/shark/5.0/views/{view_id}/data/{output_id}/legend
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON


```
[
  {
    "description": string,
    "calculation": string,
    "id": string,
    "field": string,
    "base": string,
    "type": string,
    "dimension": boolean,
    "name": string
  }
]

Example:
[
  {
    "description": "IP protocol, TCP port or UDP port converted into a traffic type string (e.g. 'Email' or 'Web').",
    "calculation": "NONE",
    "dimension": true,
    "field": "generic.application",
    "base": "NONE",
    "type": "SHORT_STRING",
    "id": "x0",
    "name": "Traffic Type"
  },
  {
    "description": "Bit Count",
    "calculation": "TIME_AVG",
    "dimension": false,
    "field": "generic.bits",
    "base": "DEC",
    "type": "UINT64",
    "id": "x1",
    "name": "Bits"
  }
]
```

Property Name	Type	Description	Notes
<i>legend</i>	<array of <object>>	Output legend	
<i>legend</i> [label]	<object>	Legend Entry	
<i>legend</i> [label].description	<string>	Description	
<i>legend</i> [label].calculation	<string>	Calculation type	Values: NONE, SUM, MAX, MIN, AVG, TIME_AVG
<i>legend</i> [label].id	<string>	Id	
<i>legend</i> [label].field	<string>	Field	
<i>legend</i> [label].base	<string>	Base	Values: NONE, DEC, HEX, OCT, DEC_HEX, HEX_DEC, PERC
<i>legend</i> [label].type	<string>	Type	Values: NONE, PROTOCOL, BOOLEAN, UINT8, UINT16, UINT24, UINT32, UINT64, INT8, INT16, INT24, INT32, INT64, FLOAT, DOUBLE, ABSOLUTE_TIME, RELATIVE_TIME, STRING, STRINGZ, SHORT_STRING, UINT_STRING, ETHER, BYTES, UINT_BYTES, IPv4, IPv6, UDP_PORT, TCP_PORT, IPXNET, FRAMENUM, PCRE, GUID, OID, NUM_TYPES, INDEX, EUI64
<i>legend</i> [label].dimension	<boolean>	True if dimension	
<i>legend</i> [label].name	<string>	Name	

views: Create view

Create a new view.

POST <https://{device}/api/shark/5.0/views>

Authorization

This request requires authorization.

Request Body

Provide a [view](#) data object.

Response Body

On success, the server returns a response body with the following structure:

JSON

```
{
  "id": string,
  "data_source_type": string
}
```

Example:

```
{
  "id": "00018ED5",
  "data_source_type": "PACKETS"
}
```

Property Name	Type	Description	Notes
<i>view_id</i>	<object>	ID of the newly created view	
<i>view_id.id</i>	<string>	View ID	
<i>view_id.data_source_type</i>	<string>	Data source type	Values: INDEX, PACKETS

views: Update view acl

Modify the access control list for running view {view_id}.

```
POST https://{device}/api/shark/5.0/views/{view_id}/acl
```

Authorization

This request requires authorization.

Request Body

Provide a request body with the following structure:

JSON

```
{
  "action": string,
  "value": string
}
```

Example:

```
{
  "action": "ADD_USER",
  "value": "normaluser"
}
```

Property Name	Type	Description	Notes
<i>acl_action</i>	<object>	Action type on the access list	
<i>acl_action.action</i>	<string>	Action type on the access list	Values: ADD_USER, REMOVE_USER, ADD_GROUP, REMOVE_GROUP
<i>acl_action.value</i>	<string>	User/group name depending on the action type	

Response Body

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

views: List views

Get the list of currently running views.

```
GET https://{device}/api/shark/5.0/views
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```
[
  {
    "locked": boolean,
    "creation_time": timestamp-hp,
    "watches": [
      {
        "last_event_time": timestamp-hp,
        "event_count": number,
        "last_error": string,
        "state": string,
        "first_event_time": timestamp-hp,
        "id": string
      }
    ],
    "state": string,
    "owner": string,
    "id": string
  }
]
```

Example:

```
[
  {
    "locked": false,
    "creation_time": 1348518372678002,
    "watches": [],
    "state": "DONE",
    "owner": "admin",
    "id": "00018ED5"
  }
]
```

Property Name	Type	Description	Notes
<i>views</i>	<i><array of <object>></i>	View list	
<i>views[view]</i>	<i><object></i>	Summary information for a view	
<i>views[view].locked</i>	<i><boolean></i>	True if locked	
<i>views[view].creation_time</i>	<i><timestamp-hp></i>	View creation time	
<i>views[view].watches</i>	<i><array of <object>></i>	Watch list for this view	
<i>views[view].watches[watch]</i>	<i><object></i>		
<i>views[view].watches[watch].last_event_time</i>	<i><timestamp-hp></i>	Time of the last triggered event	
<i>views[view].watches[watch].event_count</i>	<i><number></i>	Number of triggered events	
<i>views[view].watches[watch].last_error</i>	<i><string></i>	Error description, if the watch is in an error state	
<i>views[view].watches[watch].state</i>	<i><string></i>	Watch state	Values: UNINITIALIZED, LOADED, PARAMS_LOADED, INITIALIZED, READY, RUNNING, ERRORS, DONE, CLOSING, PAUSED
<i>views[view].watches[watch].first_event_time</i>	<i><timestamp-hp></i>	Time of the first triggered event	
<i>views[view].watches[watch].id</i>	<i><string></i>	Watch Id	
<i>views[view].state</i>	<i><string></i>	View state	Values: UNINITIALIZED, LOADED, PARAMS_LOADED, INITIALIZED, READY, RUNNING, ERRORS, DONE, CLOSING, PAUSED
<i>views[view].owner</i>	<i><string></i>	Owner user name	
<i>views[view].id</i>	<i><string></i>	View ID	

views: Lock view

Lock view {view_id}.

```
POST https://{device}/api/shark/5.0/views/{view_id}/lock
```

Authorization

This request requires authorization.

Request Body

Do not provide a request body.

Response Body

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

views: Get view configuration

Get configuration for view {view_id}.

```
GET https://{device}/api/shark/5.0/views/{view_id}
```

Authorization

This request requires authorization.

Response Body

Returns a [view](#) data object.

views: Get view output data

Get data for the output {output_id} in view {view_id}.

```
GET https://{device}/api/shark/5.0/views/{view_id}/data/{output_id}?countonly={number}&end={number}&toentry={number}&start={number}&fromentry={number}&delta={string}&sorttype={string}&aggregated={string}&sortby={string}
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>countonly</i>	<number>	(Only available when 'aggregated' = 'true'.) Return number of rows only.	Optional
<i>end</i>	<number>	Timestamp value representing end time.	Optional
<i>toentry</i>	<number>	In paged output: number of last output row.	Optional
<i>start</i>	<number>	Timestamp value representing start time.	Optional
<i>fromentry</i>	<number>	In paged output: number of first output row. NOTE: Row numbers start from 0.	Optional
<i>delta</i>	<string>	Sampling interval, in nanoseconds	Optional
<i>sorttype</i>	<string>	'ascending' or 'descending'	Optional
<i>aggregated</i>	<string>	'true' if output is in a single sample.	Optional
<i>sortby</i>	<string>	Name (x0, x1, etc.) of column used to sort output values.	Optional

Response Body

On success, the server returns a response body with the following structure:

JSON

```
{
  "samples": [
    {
      "gap_start": timestamp-hp,
      "value_sum": number,
      "value_count": number,
      "p": number,
      "u": number,
      "t": timestamp-hp,
      "vals": [
        [
          string
        ]
      ],
      "gap_end": timestamp-hp
    }
  ]
}
```

Example:

```
{
  "samples": [
```

```
{
  "value_count": 5,
  "p": 391,
  "vals": [
    [
      "IM",
      "776"
    ],
    [
      "ICMP",
      "3424"
    ],
    [
      "Voice/Video",
      "4480"
    ],
    [
      "Unknown",
      "126696"
    ],
    [
      "Web",
      "2649072"
    ]
  ],
  "t": 1195590481719742000,
  "value_sum": 2784448
},
{
  "value_count": 6,
  "p": 416,
  "vals": [
    [
      "ICMP",
      "480"
    ],
    [
      "ARP",
      "1184"
    ],
    [
      "IM",
      "2552"
    ],
    [
      "Voice/Video",
      "4480"
    ],
    [
      "Unknown",
      "111424"
    ],
    [
      "Web",
      "2685024"
    ]
  ],
  "t": 1195590482719742000,
  "value_sum": 2805144
},
{
  "value_count": 4,
  "p": 390,
  "vals": [
    [
      "ARP",
      "2000"
    ],
    [
      "IM",
      "7808"
    ],
    [
      "Unknown",
      "115392"
    ],
    [
      "Web",
      "2633664"
    ]
  ],
  "t": 1195590483719742000,
  "value_sum": 2758864
}
}
```

Property Name	Type	Description	Notes
<i>samples</i>	<object>	View output	
<i>samples.samples</i>	<array of <object>>	Samples list	
<i>samples.samples[sample]</i>	<object>	Sample for a view output	
<i>samples.samples[sample].gap_start</i>	<timestamp- hp>	Timestamp at the start of a data gap, representing a period of time in which there are no output values for the view	If present, then the vals list will be empty. In XML, a gap is encoded as <gap t1="start" t2="end"/>.
<i>samples.samples[sample].value_sum</i>	<number>	Sum of all the values for the sorting column	Optional
<i>samples.samples[sample].value_count</i>	<number>	Number of distinct rows	Optional; Present only when the output is aggregated
<i>samples.samples[sample].p</i>	<number>	Processed packet count	Optional
<i>samples.samples[sample].u</i>	<number>	Unprocessed packet count	Optional
<i>samples.samples[sample].t</i>	<timestamp- hp>	Sample timestamp	
<i>samples.samples[sample].vals</i>	<array of <array of <string>>>	Values list	In XML, the values list is encoded as <val x0="val0" x1="val1" .../>, where x0..xN correspond to the columns defined in the view configuraton
<i>samples.samples[sample].vals[val]</i>	<array of <string>>	Value	
<i>samples.samples[sample].vals[val][val]</i>	<string>		
<i>samples.samples[sample].gap_end</i>	<timestamp- hp>	Timestamp at the end of a data gap, representing a period of time in which there are no output values for the view	If present, then the vals list will be empty. In XML, a gap is encoded as <gap t1="start" t2="end"/>.

views: Delete view

Delete view {view_id}. This will stop any packet processing and delete the view results.

```
DELETE https://{device}/api/shark/5.0/views/{view_id}
```

Authorization

This request requires authorization.

Response Body

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

ping: Ping (POST)

Test availability of POST method.

```
POST https://{device}/api/shark/5.0/ping
```

Authorization

This request requires authorization.

Request Body

Do not provide a request body.

Response Body

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

ping: Ping (PUT)

Test availability of PUT method.

```
PUT https://{device}/api/shark/5.0/ping
```

Authorization

This request requires authorization.

Request Body

Do not provide a request body.

Response Body

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

ping: Ping (DELETE)

Test availability of DELETE method.

```
DELETE https://{device}/api/shark/5.0/ping
```

Authorization

This request requires authorization.

Response Body

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

ping: Ping (GET)

Generic ping response.

```
GET https://{device}/api/shark/5.0/ping
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```
{  
}
```

Property Name	Type	Description	Notes
<i>ping</i>	<i><object></i>		

system: Upload system update iso

Upload a new ISO file for system update

```
POST https://{device}/api/shark/5.0/system/update/iso
```

Authorization

This request requires authorization.

HTTP Headers

Property Name	Type	Description	Notes
<i>Content-Type</i>	<i><string></i>	Content type	Must be 'multipart/form-data'
<i>Content-Disposition</i>	<i><string></i>	Name of the file	Must be of the form Content-Disposition: form-data; name="iso-file"; filename="[FILENAME]"

Request Body

Provide a request body containing the update ISO file with content type multipart/form-data.

Response Body

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

system: Reinitialize storage system

Request reinitialization of storage subsystem.

```
POST https://{device}/api/shark/5.0/system/storage/reinitialize
```

Authorization

This request requires authorization.

Request Body

Do not provide a request body.

Response Body

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

system: Get version info

Get version information

```
GET https://{device}/api/shark/5.0/system/version_info
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```
{
  "packet_recorder_version": string,
  "shark_version": string,
  "turbocap_api_version": string,
  "serial_number": string,
  "shark_probe_version": string,
  "turbocap_driver_version": string,
  "protocol_version": string
}
```

Example:

```
{
  "packet_recorder_version": "1.8.1005.0136",
  "protocol_version": "4.0",
  "shark_version": "10.0 (10.0.1005.0136)",
  "turbocap_api_version": "1.8.1005.0136",
  "shark_probe_version": "10.0.1000.0000",
  "turbocap_driver_version": "driver not loaded",
  "serial_number": "N/A"
}
```

Property Name	Type	Description	Notes
<code>version_info</code>	<code><object></code>		
<code>version_info.packet_recorder_version</code>	<code><string></code>	Version of the packet recorder component	
<code>version_info.shark_version</code>	<code><string></code>	User-friendly version of the system	
<code>version_info.turbocap_api_version</code>	<code><string></code>	Version of the turbocap api component	
<code>version_info.serial_number</code>	<code><string></code>	Serial number of the system	
<code>version_info.shark_probe_version</code>	<code><string></code>	Version of the embedded server component	
<code>version_info.turbocap_driver_version</code>	<code><string></code>	Version of the turbocap driver component	
<code>version_info.protocol_version</code>	<code><string></code>	Highest API version supported by the system	

system: Get system info

Get detailed system information

```
GET https://{device}/api/shark/5.0/system/info
```


Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```
{
  "webui_root_path": string,
  "uptime": number,
  "build_variant": string,
  "system_type": string,
  "start_time": timestamp-hp,
  "hostname": string,
  "has_webui": boolean,
  "build_time": string,
  "embedded_wireshark": boolean,
  "webui_port": number,
  "internal_version": string,
  "version": string,
  "view_version": string,
  "timezone": string,
  "default_user_directory": string,
  "protocol_version": string,
  "build_type": string,
  "webui_SSL": boolean,
  "local_time": timestamp-hp
}
```

Example:

```
{
  "webui_port": 443,
  "uptime": 40382739000,
  "build_variant": "TurboCap",
  "start_time": 1354579018824095000,
  "hostname": "shark.localdomain",
  "has_webui": true,
  "build_time": "Dec 3 2012 15:33:46",
  "webui_root_path": "/",
  "view_version": "3.5",
  "internal_version": "10.0.1000.0000",
  "version": "10.0",
  "system_type": "Linux",
  "protocol_version": "4.0",
  "timezone": "-0800",
  "build_type": "Debug",
  "webui_SSL": true,
  "local_time": 1354579059206834000
}
```

Property Name	Type	Description	Notes
<code>system_info</code>	<code><object></code>	Information about this Shark	
<code>system_info.webui_root_path</code>	<code><string></code>	(If web UI is enabled) Root path for web UI resources	Optional
<code>system_info.uptime</code>	<code><number></code>	Elapsed time (in nanoseconds) since this Shark was started	
<code>system_info.build_variant</code>	<code><string></code>	Variant of Shark build	
<code>system_info.system_type</code>	<code><string></code>	Operating system on which this Shark is running	
<code>system_info.start_time</code>	<code><timestamp-hp></code>	Time at which this Shark started	
<code>system_info.hostname</code>	<code><string></code>	Host name of this Shark	
<code>system_info.has_webui</code>	<code><boolean></code>	'true' if the web UI is enabled for this build	
<code>system_info.build_time</code>	<code><string></code>	Date and time at which this Shark was built	
<code>system_info.embedded_wireshark</code>	<code><boolean></code>	'true' if Wireshark is embedded with this Shark	Optional
<code>system_info.webui_port</code>	<code><number></code>	(If web UI is enabled) Port on which web UI can be accessed	Optional
<code>system_info.internal_version</code>	<code><string></code>	Current long-form version of Shark software	
<code>system_info.version</code>	<code><string></code>	Current version of Shark software	
<code>system_info.view_version</code>	<code><string></code>	Current version of Shark views	
<code>system_info.timezone</code>	<code><string></code>	UTC offset for this Shark	
<code>system_info.default_user_directory</code>	<code><string></code>	Default directory for user files	Optional
<code>system_info.protocol_version</code>	<code><string></code>	Current version of Shark REST API	

<code>system_info.build_type</code>	<code><string></code>	Type of Shark build ('Final' for production, 'Debug' for testing)	
<code>system_info.webui_ssl</code>	<code><boolean></code>	(If web UI is enabled) 'true' if web UI uses SSL for transport	Optional
<code>system_info.local_time</code>	<code><timestamp-hp></code>	Current system time	

system: Fetch system update iso

Request fetch of update ISO from a URL

POST `https://{device}/api/shark/5.0/system/update/url`

Authorization

This request requires authorization.

Request Body

Provide a request body with the following structure:

JSON

```
{
  "url": string
}
```

Example:

```
{
  "url": "http://myserver.com/isos/my.iso"
}
```

Property Name	Type	Description	Notes
<code>update_fetch</code>	<code><object></code>		
<code>update_fetch.url</code>	<code><string></code>	URL of ISO to be used for update	

Response Body

On success, the server returns a response body with the following structure:

JSON

```
{
  "shark_user_version": string,
  "comment": string,
  "need_reboot": boolean,
  "executing_job_description": string,
  "iso_name": string,
  "shark_version": string,
  "update_to": string,
  "iso_size": number,
  "state": string,
  "iso_sha_hash": string,
  "update_to_internal": string,
  "init_id": string,
  "estimate": number,
  "pre_start_message": string
}
```

Example:

```
{
  "shark_user_version": "yyyy",
  "iso_name": "my_iso_12345.iso",
  "shark_version": "xxxx",
  "iso_size": 4564564,
  "state": "RUNNING",
  "init_id": "abc123",
  "estimate": 30
}
```

Property Name	Type	Description	Notes
<code>update</code>	<code><object></code>		
<code>update.shark_user_version</code>	<code><string></code>	Currently running system version (user string)	

<code>update.comment</code>	<code><string></code>	Message from update subsystem	Optional; In case of a 'FAILED_GRACEFUL' or 'FAILED_CRITICAL', provides a reason for failure
<code>update.need_reboot</code>	<code><boolean></code>	'true' if a the update requires a reboot	Optional
<code>update.executing_job_description</code>	<code><string></code>	Description of update task currently under way	Optional
<code>update.iso_name</code>	<code><string></code>	File name of the uploaded ISO file	Optional
<code>update.shark_version</code>	<code><string></code>	Currently running system version	
<code>update.update_to</code>	<code><string></code>	Version to which update will be carried out	Optional
<code>update.iso_size</code>	<code><number></code>	Size (in bytes) of the uploaded ISO file	Optional
<code>update.state</code>	<code><string></code>	Current state of the update	Values: NEUTRAL, INITIALIZING, INITIALIZED, RUNNING, FAILED_GRACEFUL, FAILED_CRITICAL, UNKNOWN
<code>update.iso_sha_hash</code>	<code><string></code>	SHA256 hash of the uploaded ISO file	Optional
<code>update.update_to_internal</code>	<code><string></code>	Internal version string to which update will be carried out	Optional
<code>update.init_id</code>	<code><string></code>	When status is 'INITIALIZED', the ID to be provided when starting the update (i.e. to request a state change to 'RUNNING')	Optional
<code>update.estimate</code>	<code><number></code>	Estimated time to complete update	Seconds
<code>update.pre_start_message</code>	<code><string></code>	Message from update subsystem to be displayed before starting update	Optional

system: Modify system update state

Update state of system update

```
PUT https://{device}/api/shark/5.0/system/update/state
```

Authorization

This request requires authorization.

Request Body

Provide a request body with the following structure:

JSON

```
{
  "reset": boolean,
  "init_id": string,
  "state": string
}
```

Example:

```
{
  "reset": true,
  "state": "INITIALIZED"
}
```

Property Name	Type	Description	Notes
<code>update_state</code>	<code><object></code>	Request change in update state value on server	
<code>update_state.reset</code>	<code><boolean></code>	If 'true', uninitializes update	Optional; Only applies when requesting 'NEUTRAL' state.
<code>update_state.init_id</code>	<code><string></code>	Update ID provided by the update subsystem from the most recent status request	Optional; Only valid when the requested state is 'RUNNING'. Ignored in all other requested states.
<code>update_state.state</code>	<code><string></code>	Requested new state of update subsystem	Values: NEUTRAL, INITIALIZING, INITIALIZED, RUNNING, FAILED_GRACEFUL, FAILED_CRITICAL, UNKNOWN

Response Body

On success, the server returns a response body with the following structure:

JSON

```

{
  "shark_user_version": string,
  "comment": string,
  "need_reboot": boolean,
  "executing_job_description": string,
  "iso_name": string,
  "shark_version": string,
  "update_to": string,
  "iso_size": number,
  "state": string,
  "iso_sha_hash": string,
  "update_to_internal": string,
  "init_id": string,
  "estimate": number,
  "pre_start_message": string
}

```

Example:

```

{
  "shark_user_version": "yyyy",
  "iso_name": "my_iso_12345.iso",
  "shark_version": "xxxx",
  "iso_size": 4564564,
  "state": "RUNNING",
  "init_id": "abc123",
  "estimate": 30
}

```

Property Name	Type	Description	Notes
<i>update</i>	<object>		
<i>update.shark_user_version</i>	<string>	Currently running system version (user string)	
<i>update.comment</i>	<string>	Message from update subsystem	Optional; In case of a 'FAILED_GRACEFUL' or 'FAILED_CRITICAL', provides a reason for failure
<i>update.need_reboot</i>	<boolean>	'true' if a the update requires a reboot	Optional
<i>update.executing_job_description</i>	<string>	Description of update task currently under way	Optional
<i>update.iso_name</i>	<string>	File name of the uploaded ISO file	Optional
<i>update.shark_version</i>	<string>	Currently running system version	
<i>update.update_to</i>	<string>	Version to which update will be carried out	Optional
<i>update.iso_size</i>	<number>	Size (in bytes) of the uploaded ISO file	Optional
<i>update.state</i>	<string>	Current state of the update	Values: NEUTRAL, INITIALIZING, INITIALIZED, RUNNING, FAILED_GRACEFUL, FAILED_CRITICAL, UNKNOWN
<i>update.iso_sha_hash</i>	<string>	SHA256 hash of the uploaded ISO file	Optional
<i>update.update_to_internal</i>	<string>	Internal version string to which update will be carried out	Optional
<i>update.init_id</i>	<string>	When status is 'INITIALIZED', the ID to be provided when starting the update (i.e. to request a state change to 'RUNNING')	Optional
<i>update.estimate</i>	<number>	Estimated time to complete update	Seconds
<i>update.pre_start_message</i>	<string>	Message from update subsystem to be displayed before starting update	Optional

system: Restart system

Restart the shark service or reboot the system.

```
POST https://{device}/api/shark/5.0/system/restart
```

Authorization

This request requires authorization.

Request Body

Provide a request body with the following structure:

JSON

```

{
  "type": string
}

Example:
{
  "type": "PROBE"
}

```

Property Name	Type	Description	Notes
<i>restart</i>	<object>	Configuration to restart	
<i>restart.type</i>	<string>	Type of service to restart	Values: SHARK, PROBE, PACKETRECORDER

Response Body

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

system: Format storage system

Request packet storage reformat.

```
POST https://{device}/api/shark/5.0/system/format_storage
```

Authorization

This request requires authorization.

Request Body

Provide a request body with the following structure:

JSON

```

{
  "reserved_space": number
}

Example:
{
  "reserved_space": 10
}

```

Property Name	Type	Description	Notes
<i>format_storage</i>	<object>	Configuration information to format the packet storage	
<i>format_storage.reserved_space</i>	<number>	Percentage of unused space at the end of the packet storage	

Response Body

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

system: Get audit log

Get the audit log as a text file. Response content type is 'text/plain'.

```
GET https://{device}/api/shark/5.0/system/audit_log
```

Authorization

This request requires authorization.

Response Body

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

system: Generate system dump

```
GET https://{device}/api/shark/5.0/system/sysdump?dump_type={string}&case_id={string}
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>dump_type</i>	<i><string></i>	'CURRENT': Includes current Shark Probe and Shark Packet Recorder logs; 'PROBE': Includes all Shark Probe logs; 'PACKETRECORDER': Includes all Shark Packet Recorder logs; 'COMPLETE': Includes all Shark Probe and Shark Packet Recorder logs.	Optional
<i>case_id</i>	<i><string></i>	Optional case ID to be attached to output file name.	Optional

Response Body

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

system: Get system update status

Get current system update status

```
GET https://{device}/api/shark/5.0/system/update
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```
{
  "shark_user_version": string,
  "comment": string,
  "need_reboot": boolean,
  "executing_job_description": string,
  "iso_name": string,
  "shark_version": string,
  "update_to": string,
  "iso_size": number,
  "state": string,
  "iso_sha_hash": string,
  "update_to_internal": string,
  "init_id": string,
  "estimate": number,
  "pre_start_message": string
}
```

Example:

```
{
  "shark_user_version": "yyyy",
  "iso_name": "my_iso_12345.iso",
  "shark_version": "xxxx",
  "iso_size": 4564564,
  "state": "RUNNING",
  "init_id": "abc123",
  "estimate": 30
}
```

Property Name	Type	Description	Notes
<i>update</i>	<i><object></i>		
<i>update.shark_user_version</i>	<i><string></i>	Currently running system version (user string)	
<i>update.comment</i>	<i><string></i>	Message from update subsystem	Optional; In case of a 'FAILED_GRACEFUL' or 'FAILED_CRITICAL', provides a reason for failure
<i>update.need_reboot</i>	<i><boolean></i>	'true' if a the update requires a reboot	Optional
<i>update.executing_job_description</i>	<i><string></i>	Description of update task currently under way	Optional
<i>update.iso_name</i>	<i><string></i>	File name of the uploaded ISO file	Optional
<i>update.shark_version</i>	<i><string></i>	Currently running system version	
<i>update.update_to</i>	<i><string></i>	Version to which update will be carried out	Optional
<i>update.iso_size</i>	<i><number></i>	Size (in bytes) of the uploaded ISO file	Optional

<code>update.state</code>	<code><string></code>	Current state of the update	Values: NEUTRAL, INITIALIZING, INITIALIZED, RUNNING, FAILED_GRACEFUL, FAILED_CRITICAL, UNKNOWN
<code>update.iso_sha_hash</code>	<code><string></code>	SHA256 hash of the uploaded ISO file	Optional
<code>update.update_to_internal</code>	<code><string></code>	Internal version string to which update will be carried out	Optional
<code>update.init_id</code>	<code><string></code>	When status is 'INITIALIZED', the ID to be provided when starting the update (i.e. to request a state change to 'RUNNING')	Optional
<code>update.estimate</code>	<code><number></code>	Estimated time to complete update	Seconds
<code>update.pre_start_message</code>	<code><string></code>	Message from update subsystem to be displayed before starting update	Optional

system: Shutdown system

Shut down the system.

```
POST https://{device}/api/shark/5.0/system/shutdown
```

Authorization

This request requires authorization.

Request Body

Do not provide a request body.

Response Body

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

system: Get system storage info

Get storage monitor status

```
GET https://{device}/api/shark/5.0/system/storage
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

```
JSON
```

```

{
  "total_space": number,
  "disks": [
    {
      "expected_serial": string,
      "label": string,
      "state_type": string,
      "state": string,
      "row_id": string,
      "column_id": string,
      "model": string,
      "serial": string
    }
  ],
  "allocated_space": number,
  "used_space": number,
  "state_type": string,
  "state": string,
  "available_space": number,
  "can_reinitialize": boolean
}

```

Example:

```

{
  "total_space": 42815455232,
  "disks": [
    {
      "column_id": "0",
      "state_type": "OK",
      "state": "OK",
      "model": "N/A",
      "label": "N/A",
      "row_id": "0",
      "serial": "N/A"
    }
  ],
  "allocated_space": 11811160064,
  "used_space": 11676942336,
  "state_type": "OK",
  "state": "OK",
  "available_space": 31138512896,
  "can_reinitialize": true
}

```

Property Name	Type	Description	Notes
<i>storage</i>	<object>		
<i>storage.total_space</i>	<number>	Total space in the storage system	Optional
<i>storage.disks</i>	<array of <object>>	List of disks in the storage system	Optional
<i>storage.disks[disk]</i>	<object>	Storage system disk information	
<i>storage.disks[disk].expected_serial</i>	<string>	Expected serial number of the disk	Optional
<i>storage.disks[disk].label</i>	<string>	Label of the disk	
<i>storage.disks[disk].state_type</i>	<string>	State code of the disk	Values: OK, WARNING, ERROR
<i>storage.disks[disk].state</i>	<string>	State description of the disk	
<i>storage.disks[disk].row_id</i>	<string>	Row number for the disk	
<i>storage.disks[disk].column_id</i>	<string>	Column number for the disk	
<i>storage.disks[disk].model</i>	<string>	Model of the disk	
<i>storage.disks[disk].serial</i>	<string>	Serial number of the disk	
<i>storage.allocated_space</i>	<number>	Allocated space in the storage system	Optional
<i>storage.used_space</i>	<number>	Used space in the storage system	Optional
<i>storage.state_type</i>	<string>	State code of the storage system	Values: OK, WARNING, ERROR
<i>storage.state</i>	<string>	State description of the storage system	
<i>storage.available_space</i>	<number>	Available space in the storage system	Optional
<i>storage.can_reinitialize</i>	<boolean>	Whether or not the storage system can be reinitialized	Optional

watches: Enable watch

Enable watch {watch_id} on view {view_id}.

POST https://{device}/api/shark/5.0/views/{view_id}/watches/{watch_id}/enable

Authorization

This request requires authorization.

Request Body

Do not provide a request body.

Response Body

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

watches: Create watch

Create a new watch for view {view_id}.

```
POST https://{device}/api/shark/5.0/views/{view_id}/watches
```

Authorization

This request requires authorization.

Request Body

Provide a [watch](#) data object.

Response Body

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

watches: List watches

Get the list of watches for view {view_id}.

```
GET https://{device}/api/shark/5.0/views/{view_id}/watches
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

```
JSON
```

[*watch*]

Example:

```
[
  {
    "info": {
      "name": "Watch 1"
    },
    "severity": 6,
    "triggers": [
      {
        "condition_operator": "AND",
        "conditions": [
          {
            "field": "c2",
            "condition_info": {
              "aggregation_type": "VALUE",
              "value": "0",
              "check_type": "GREATER"
            }
          }
        ]
      },
      {
        "bool_operator": "OR",
        "dimension_restrictions": {
          "sub_restrictions": [],
          "restrictions": [
            {
              "field": "c1",
              "value": "Web"
            }
          ]
        },
        "bool_operator": "OR"
      }
    ],
    "uid": "Trigger 1"
  }
],
"watch_uid": "watch_1",
"enabled": true,
"actions": {
  "fired_triggers": {
    "bool_operator": "AND",
    "triggering_mode": "LEADINGEDGE",
    "triggers": [
      "Trigger 1"
    ]
  }
},
"actions": [
  {
    "type": "InternalDBLog",
    "uid": "Action 1",
    "parameters": [],
    "side": "SERVER"
  }
]
},
"timing": {
  "from": "NOW",
  "time_analysis_mode": "SAMPLE_BY_SAMPLE",
  "interval_ms": 1000
},
"output_uid": "OUID_Output_Over_Time"
}
]
```

Property Name	Type	Description	Notes
<i>watches</i>	<array of <watch>>	Watch list	
<i>watches</i> [watch]	<watch>	Instance of a <watch>	

watches: Disable watch

Disable watch {watch_id} on view {view_id}.

```
POST https://{device}/api/shark/5.0/views/{view_id}/watches/{watch_id}/disable
```

Authorization

This request requires authorization.

Request Body

Do not provide a request body.

Response Body

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

watches: Delete watch

Delete watch {watch_id} on view {view_id}.

```
DELETE https://{device}/api/shark/5.0/views/{view_id}/watches/{watch_id}
```

Authorization

This request requires authorization.

Response Body

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

watches: Update watch

Update configuration for watch {watch_id} on view {view_id}.

```
PUT https://{device}/api/shark/5.0/views/{view_id}/watches/{watch_id}
```

Authorization

This request requires authorization.

Request Body

Provide a *watch* data object.

Response Body

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

watches: Get watch detail

Config information for watch {watch_id} on view {view_id}.

```
GET https://{device}/api/shark/5.0/views/{view_id}/watches/{watch_id}
```

Authorization

This request requires authorization.

Response Body

Returns a *watch* data object.

clips: Get clip index info

Index info for clip {clip_id}

```
GET https://{device}/api/shark/5.0/clips/{clip_id}/index
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
clip_id	<string>	Clip identifier	

Response Body

Returns an [index_info](#) data object.

clips: Get clip detail

Info on clip {clip_id}

```
GET https://{device}/api/shark/5.0/clips/{clip_id}
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
clip_id	<string>	Clip identifier	

Response Body

On success, the server returns a response body with the following structure:

JSON

```
{
  "status": clip\_status,
  "index": index\_info,
  "config": clip\_config,
  "id": string
}
```

Example:

```
{
  "status": {
    "estimated_size": 268435456,
    "modification_time": 1345830535,
    "creation_time": 1345830425,
    "locked": true
  },
  "index": {
    "status": "OK",
    "start_time": 1345830425000000000,
    "end_time": 1345830435000000000
  },
  "config": {
    "job_id": "000000A3",
    "filters": [
      {
        "type": "TIME",
        "description": "This is a time filter.",
        "value": "1345830425000000000, 1345830435000000000"
      },
      {
        "type": "BPF",
        "value": "port 80"
      }
    ]
  },
  "description": "This is a clip on job 000000A3"
},
  "id": "000000A30002"
}
```

Property Name	Type	Description	Notes
clip	<object>	Description and status of trace clip	
clip.status	<clip_status>	Status information for this clip	
clip.index	<index_info>	Index information for this clip	
clip.config	<clip_config>	Configuration information for this clip	
clip.id	<string>	Clip id	

clips: Create clip

Create a new trace clip

```
POST https://{device}/api/shark/5.0/clips
```

Authorization

This request requires authorization.

Request Body

Provide a [clip_config](#) data object.

Response Body

On success, the server returns a response body with the following structure:

JSON

```
{
  "id": string
}
```

Example:

```
{
  "id": "000000A30002"
}
```

Property Name	Type	Description	Notes
<i>clip</i>	<object>		
<i>clip.id</i>	<string>	Identifier of the newly created clip	

clips: Get clip status

Status info for clip {clip_id}

```
GET https://{device}/api/shark/5.0/clips/{clip_id}/status
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>clip_id</i>	<string>	Clip identifier	

Response Body

Returns a [clip_status](#) data object.

clips: Get clip config

Config info for clip {clip_id}

```
GET https://{device}/api/shark/5.0/clips/{clip_id}/config
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>clip_id</i>	<string>	Clip identifier	

Response Body

Returns a [clip_config](#) data object.

clips: List clips

Get the list of trace clips

```
GET https://{device}/api/shark/5.0/clips
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```
[
  {
    "status": clip\_status,
    "index": index\_info,
    "config": clip\_config,
    "id": string
  }
]
```

Example:

```
[
  {
    "status": {
      "estimated_size": 268435456,
      "modification_time": 1345830535,
      "creation_time": 1345830425,
      "locked": true
    },
    "index": {
      "status": "OK",
      "start_time": 1345830425000000000,
      "end_time": 1345830435000000000
    },
    "config": {
      "job_id": "000000A3",
      "filters": [
        {
          "type": "TIME",
          "description": "This is a time filter.",
          "value": "1345830425000000000, 1345830435000000000"
        },
        {
          "type": "BPF",
          "value": "port 80"
        }
      ],
      "description": "This is a clip on job 000000A3"
    },
    "id": "000000A30002"
  },
  {
    "status": {
      "estimated_size": 268435456,
      "modification_time": 1345830563,
      "creation_time": 1345830563,
      "locked": true
    },
    "config": {
      "job_id": "000000A3",
      "filters": [
        {
          "type": "TIME",
          "description": "This is a time filter.",
          "value": "1345830493000000000, 1345830596000000000"
        },
        {
          "type": "SHARK",
          "description": "This is a shark filter.",
          "value": "tcp.port=\\\"80\\\""
        }
      ],
      "description": "This is the third clip on job 000000A3"
    },
    "id": "000000A30003"
  }
]
```

Property Name	Type	Description	Notes
<i>clips</i>	<array of <object>>	List of clips	
<i>clips</i> [clip]	<object>	Description and status of trace clip	
<i>clips</i> [clip].status	< clip_status >	Status information for this clip	

<code>clips[clip].index</code>	<code><index_info></code>	Index information for this clip	
<code>clips[clip].config</code>	<code><clip_config></code>	Configuration information for this clip	
<code>clips[clip].id</code>	<code><string></code>	Clip id	

clips: Update clip lock status

Update lock status for clip {clip_id}

```
PUT https://{device}/api/shark/5.0/clips/{clip_id}/status
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<code>clip_id</code>	<code><string></code>	Clip identifier	

Request Body

Provide a request body with the following structure:

JSON

```
{
  "locked": boolean
}
```

Example:

```
{
  "locked": true
}
```

Property Name	Type	Description	Notes
<code>status</code>	<code><object></code>		
<code>status.locked</code>	<code><boolean></code>	'true' to lock the packets and the index for this clip, 'false' otherwise	

Response Body

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

clips: Update clip

Update config info for clip {clip_id}

```
PUT https://{device}/api/shark/5.0/clips/{clip_id}
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<code>clip_id</code>	<code><string></code>	Clip identifier	

Request Body

Provide a `clip_config` data object.

Response Body

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

clips: Delete clip

Delete clip {clip_id}

```
DELETE https://{device}/api/shark/5.0/clips/{clip_id}
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>clip_id</i>	<i><string></i>	Clip identifier	

Response Body

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

certificates: Update web UI certificate

Upload a new web UI certificate.

```
PUT https://{device}/api/shark/5.0/settings/certificates/web
```

Authorization

This request requires authorization.

Request Body

Provide a request body with the following structure:

JSON

```
{
  "pem": string
}
```

Example:

```
{
  "pem": "-----BEGIN PRIVATE KEY-----
\nMIIEWAIBADANBgkqhkiG9w0BAQEFAASCBAKowggSmAgEAAoIBAQDB+tj7fYFr0PiPnfnNwsQLEnRZOyk27iBHagszfdFC83nCINKAbWZqfhHMK
-----END PRIVATE KEY-----\n-----BEGIN CERTIFICATE-----
\nMIIDyTCCArGgAwIBAgIRAMjqZzjo2/e4lqogFGp6lcsWDQYJKoZIhvcNAQENBQAw\nZDESMBAGA1UEAxMJV1BJUkFTLVc3MRwwGgYDVQQKEEx
-----END CERTIFICATE-----"
}
```

Property Name	Type	Description	Notes
<i>certificate</i>	<i><object></i>	Validity days for the new self signed certificate	
<i>certificate.pem</i>	<i><string></i>	Contains the certificate in PEM format encode with Base64. This field contains both the public and private part of the new certificate.	

Response Body

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

certificates: Update profiler export certificate

Upload a new profiler export certificate.

```
PUT https://{device}/api/shark/5.0/settings/certificates/profiler_export
```

Authorization

This request requires authorization.

Request Body

Provide a request body with the following structure:

JSON


```

{
  "pem": string
}

Example:
{
  "pem": "-----BEGIN PRIVATE KEY-----
\nMIIEWaIBADANBgkqhkiG9w0BAQEFAASCBAKowggSMAgEAAoIBAQDB+tj7fYFr0PiP\nfnNwsQLEnRZOyk27iBHagszfdFC83nCINKAbWZqfhHMK
-----END PRIVATE KEY-----\n-----BEGIN CERTIFICATE-----
\nMIIDyTCCArGgAwIBAgIRAMjqZzJo2/e4lqogFGp6lcsWdQYJKoZIhvcNAQENBQA
w\nZDESMBAGA1UEAxMJV1B1JkFTLvc3MRwwGgYDVQQKEX
-----END CERTIFICATE-----"
}

```

Property Name	Type	Description	Notes
certificate	<object>	Validity days for the new self signed certificate	
certificate.pem	<string>	Contains the certificate in PEM format encode with Base64. This field contains both the public and private part of the new certificate.	

Response Body

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

certificates: Generate web UI certificate

Request generation of new self-signed certificate and private key for the web UI

```
POST https://{device}/api/shark/5.0/settings/certificates/web/generate
```

Authorization

This request requires authorization.

Request Body

Provide a request body with the following structure:

JSON

```

{
  "issued_to": {
    "locality": string,
    "country": string,
    "organization_unit": string,
    "state": string,
    "organization": string,
    "email": string
  },
  "validity": {
    "days": number
  }
}

```

Example:

```

{
  "issued_to": {
    "locality": "San%20Francisco",
    "country": "US",
    "organization_unit": "CascadeUnit",
    "state": "CA",
    "organization": "Riverbed%20Technology",
    "email": "admin%40riverbed.com"
  },
  "validity": {
    "days": 365
  }
}

```

Property Name	Type	Description	Notes
certificate_info	<object>	Contains info used to generate a new self signed certificate (only for Web Server and Profiler Export certificates)	
certificate_info.issued_to	<object>	Contains data to generate a new self-signed certificate	
certificate_info.issued_to.locality	<string>	Subject's locality	

<code>certificate_info.issued_to.country</code>	<code><string></code>	Subject's country	
<code>certificate_info.issued_to.organization_unit</code>	<code><string></code>	Subject's organization unit	
<code>certificate_info.issued_to.state</code>	<code><string></code>	Subject's state (2 letters code)	
<code>certificate_info.issued_to.organization</code>	<code><string></code>	Subject's organization	
<code>certificate_info.issued_to.email</code>	<code><string></code>	Subject's email	
<code>certificate_info.validity</code>	<code><object></code>	Validity days for a new self signed certificate	
<code>certificate_info.validity.days</code>	<code><number></code>	Validity days for a new self signed certificate	

Response Body

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

certificates: Copy profiler export certificate for web UI

Request that profiler export certificate be reused for the web UI.

```
POST https://{device}/api/shark/5.0/settings/certificates/web/copy_profiler_export
```

Authorization

This request requires authorization.

Request Body

Do not provide a request body.

Response Body

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

certificates: Delete trusted profiler certificate

Delete trusted profiler certificate {certificate_id}.

```
DELETE https://{device}/api/shark/5.0/settings/certificates/trusted_profilers/{certificate_id}
```

Authorization

This request requires authorization.

Response Body

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

certificates: Upload trusted profiler certificate

Upload a new trusted profiler certificate

```
POST https://{device}/api/shark/5.0/settings/certificates/trusted_profilers
```

Authorization

This request requires authorization.

Request Body

Provide a request body with the following structure:

```
JSON
```

```

{
  "pem": string,
  "id": string
}

```

Example:

```

{
  "pem": "-----BEGIN CERTIFICATE-----
\nMIIPTCCAYWgAwIBAgIRA01ZLvw3lwCqFen5rQf7ecwDQYJKoZIhvcNAQENBQAwngZ0xITAfBgkqhkiG9w0BCQEWEmFkbWluQHJpdmVYbn
-----END CERTIFICATE-----",
  "id": "riverbed_certificate"
}

```

Property Name	Type	Description	Notes
<i>trusted_profiler</i>	<object>	Used to upload a new trusted profiler certificate	
<i>trusted_profiler.pem</i>	<string>	Contains the certificate in PEM format encode with Base64. This field contains only the public part of the certificate.	
<i>trusted_profiler.id</i>	<string>	ID associated with the new Trusted Profiler certificate	

Response Body

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

certificates: Copy web UI certificate for profiler export

Request that web UI certificate be reused for profiler export.

```
POST https://{device}/api/shark/5.0/settings/certificates/profiler_export/copy_web
```

Authorization

This request requires authorization.

Request Body

Do not provide a request body.

Response Body

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

certificates: List certificates

Get the list of certificates

```
GET https://{device}/api/shark/5.0/settings/certificates
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```

{
  "web_certificate": {
    "issued_to": {
      "locality": string,
      "country": string,
      "organization_unit": string,
      "state": string,
      "common_name": string,
      "organization": string,
      "email": string
    },
    "issued_by": {
      "locality": string,
      "country": string,
      "organization_unit": string,
      "state": string,

```

```

"common_name": string,
"organization": string,
"email": string
},
"validity": {
  "issued": timestamp,
  "expire": timestamp
},
"pem": string,
"key": {
  "algorithm": string,
  "size": number
},
"fingerprint": number
},
"trusted_profilers": [
  {
    "id": string,
    "certificate": {
      "issued_to": {
        "locality": string,
        "country": string,
        "organization_unit": string,
        "state": string,
        "common_name": string,
        "organization": string,
        "email": string
      },
      "issued_by": {
        "locality": string,
        "country": string,
        "organization_unit": string,
        "state": string,
        "common_name": string,
        "organization": string,
        "email": string
      },
      "validity": {
        "issued": timestamp,
        "expire": timestamp
      },
      "pem": string,
      "key": {
        "algorithm": string,
        "size": number
      },
      "fingerprint": number
    }
  }
],
"profiler_export_certificate": {
  "issued_to": {
    "locality": string,
    "country": string,
    "organization_unit": string,
    "state": string,
    "common_name": string,
    "organization": string,
    "email": string
  },
  "issued_by": {
    "locality": string,
    "country": string,
    "organization_unit": string,
    "state": string,
    "common_name": string,
    "organization": string,
    "email": string
  },
  "validity": {
    "issued": timestamp,
    "expire": timestamp
  },
  "pem": string,
  "key": {
    "algorithm": string,
    "size": number
  },
  "fingerprint": number
}
}

```

Example:

```

{
  "web_certificate": {
    "issued_to": {
      "locality": "San%20Francisco",

```

```
"country": "US",
"organization_unit": "",
"state": "CA",
"common_name": "WPIRAS-W7",
"organization": "Riverbed%20Technology",
"email": ""
},
"issued_by": {
"locality": "San%20Francisco",
"country": "US",
"organization_unit": "",
"state": "CA",
"common_name": "WPIRAS-W7",
"organization": "Riverbed%20Technology",
"email": ""
},
"validity": {
"issued": 1348695181,
"expire": 1380231181
},
"pem": "-----BEGIN%20CERTIFICATE-----
%0AMIIDyTCCArGgAwIBAgIRAMjqZzjo2/e4lqogFGp6lcsWDQYJKoZIhvcNAQENBQAw%0AZDESMBAGA1UEAxMjV1BJUkFTLVc3MRwwGgYDVQ
----END%20CERTIFICATE-----%0A",
"key": {
"algorithm": "RSA",
"size": 2048
},
"fingerprint": {
"algorithm": "SHA1",
"value": "1B:FA:66:5B:B4:8C:00:4B:D4:59:02:75:30:A8:91:CB:E3:17:B2:5A"
}
},
"trusted_profilers": [
{
"id": "default_profiler",
"certificate": {
"issued_to": {
"locality": "",
"country": "",
"organization_unit": "",
"state": "",
"common_name": "Mazu",
"organization": "",
"email": ""
},
"issued_by": {
"locality": "",
"country": "",
"organization_unit": "",
"state": "",
"common_name": "Mazu",
"organization": "",
"email": ""
},
"validity": {
"issued": 1159807421,
"expire": 1475167421
},
"pem": "-----BEGIN%20CERTIFICATE-----
%0AMIIBsTCCARqgAwIBAgIJAQqvgxZRcO+ZMA0GCSqGSIb3DQEBAUAMA8xDALBgNV%0ABAMTBElhenUwHhcNMDYxMDAyMTY0MzQxW
----END%20CERTIFICATE-----%0A",
"key": {
"algorithm": "RSA",
"size": 1024
},
"fingerprint": {
"algorithm": "SHA1",
"value": "19:41:76:AD:7C:B3:40:01:70:5F:C8:50:85:AD:8F:F2:32:BC:D0:48"
}
}
},
{
"id": "default_profiler_fips",
"certificate": {
"issued_to": {
"locality": "",
"country": "",
"organization_unit": "",
"state": "",
"common_name": "Cascade%20MNMP%20Default%20Certificate",
"organization": "Riverbed%20Technology,%20Inc.",
"email": "support@riverbed.com"
},
"issued_by": {
"locality": "",
"country": "",
"organization_unit": "",
"email": ""
}
```

```

"state": "",
"common_name": "Cascade%20MNMP%20Default%20Certificate",
"organization": "Riverbed%20Technology,%20Inc.",
"email": "support@riverbed.com"
},
"validity": {
"issued": 1339518445,
"expire": 1654878445
},
"pem": "-----BEGIN%20CERTIFICATE-----
%0AMIID3zCCAsEgAwIBAgIJALUIRijTYgMoMA0GCSqGSIb3DQEBDQUAMHqXKTAnBgNV%0ABAMTIENhc2NhZGUgTU5NUCBZdWZhdWx0IENI
-----END%20CERTIFICATE-----%0A",
"key": {
"algorithm": "RSA",
"size": 2048
},
"fingerprint": {
"algorithm": "SHA1",
"value": "91:5C:1B:B7:FA:F6:CF:46:8B:EF:AE:DC:F2:4B:77:3E:30:6B:03:52"
}
}
},
"profiler_export_certificate": {
"issued_to": {
"locality": "",
"country": "",
"organization_unit": "",
"state": "",
"common_name": "Mazu",
"organization": "",
"email": ""
},
"issued_by": {
"locality": "",
"country": "",
"organization_unit": "",
"state": "",
"common_name": "Mazu",
"organization": "",
"email": ""
},
"validity": {
"issued": 1159807421,
"expire": 1475167421
},
"pem": "-----BEGIN%20CERTIFICATE-----
%0AMIIBsTCCARqgAwIBAgIJAOqvgxZRcO+ZMA0GCSqGSIb3DQEBBAUAMA8xDTALBgNV%0ABAMTBElhenUwHhcNMDYxMDAyMTY0MzQxW
-----END%20CERTIFICATE-----%0A",
"key": {
"algorithm": "RSA",
"size": 1024
},
"fingerprint": {
"algorithm": "SHA1",
"value": "19:41:76:AD:7C:B3:40:01:70:5F:C8:50:85:AD:8F:F2:32:BC:D0:48"
}
}
}
}

```

Property Name	Type	Description	Notes
<i>certificates</i>	<object>	Certificates info,	
<i>certificates.web_certificate</i>	<object>	Certificate's info	
<i>certificates.web_certificate.issued_to</i>	<object>	Certificate's details	
<i>certificates.web_certificate.issued_to.locality</i>	<string>	Subject's locality	
<i>certificates.web_certificate.issued_to.country</i>	<string>	Subject's state	
<i>certificates.web_certificate.issued_to.organization_unit</i>	<string>	Subject's organization unit	
<i>certificates.web_certificate.issued_to.state</i>	<string>	Subject's state (2 letters code)	
<i>certificates.web_certificate.issued_to.common_name</i>	<string>	Subject's common name	
<i>certificates.web_certificate.issued_to.organization</i>	<string>	Subject's organization	
<i>certificates.web_certificate.issued_to.email</i>	<string>	Subject's email	
<i>certificates.web_certificate.issued_by</i>	<object>	Certificate's details	

<i>certificates.web_certificate.issued_by.locality</i>	<string>	Subject's locality	
<i>certificates.web_certificate.issued_by.country</i>	<string>	Subject's state	
<i>certificates.web_certificate.issued_by.organization_unit</i>	<string>	Subject's organization unit	
<i>certificates.web_certificate.issued_by.state</i>	<string>	Subject's state (2 letters code)	
<i>certificates.web_certificate.issued_by.common_name</i>	<string>	Subject's common name	
<i>certificates.web_certificate.issued_by.organization</i>	<string>	Subject's organization	
<i>certificates.web_certificate.issued_by.email</i>	<string>	Subject's email	
<i>certificates.web_certificate.validity</i>	<object>	Certificate's validity info	
<i>certificates.web_certificate.validity.issued</i>	<timestamp>	Issueing date timestamp in Unix time format	Seconds since January 1, 1970
<i>certificates.web_certificate.validity.expire</i>	<timestamp>	Expire date timestamp in Unix time format	Seconds since January 1, 1970
<i>certificates.web_certificate.pem</i>	<string>	Contains the certificate in PEM format encode with Base64. This field contains only the public part of the certificate.	
<i>certificates.web_certificate.key</i>	<object>	Contains information about the certificate's key	
<i>certificates.web_certificate.key.algorithm</i>	<string>	Key algorithm	Values: RSA
<i>certificates.web_certificate.key.size</i>	<number>	Key length	
<i>certificates.web_certificate.fingerprint</i>	<number>	Certificate's fingerprint info	
<i>certificates.trusted_profilers</i>	<array of <object>>	List of Trusted Profiler certificates	
<i>certificates.trusted_profilers [trusted_profiler]</i>	<object>	Contains Trusted Profilers certificates info	
<i>certificates.trusted_profilers [trusted_profiler].id</i>	<string>	ID associated with the Trusted Profiler certificate	
<i>certificates.trusted_profilers [trusted_profiler].certificate</i>	<object>	Certificate's info	
<i>certificates.trusted_profilers [trusted_profiler].certificate.issued_to</i>	<object>	Certificate's details	
<i>certificates.trusted_profilers [trusted_profiler].certificate.issued_to.locality</i>	<string>	Subject's locality	
<i>certificates.trusted_profilers [trusted_profiler].certificate.issued_to.country</i>	<string>	Subject's state	
<i>certificates.trusted_profilers [trusted_profiler].certificate.issued_to.organization_unit</i>	<string>	Subject's organization unit	
<i>certificates.trusted_profilers [trusted_profiler].certificate.issued_to.state</i>	<string>	Subject's state (2 letters code)	
<i>certificates.trusted_profilers [trusted_profiler].certificate.issued_to.common_name</i>	<string>	Subject's common name	
<i>certificates.trusted_profilers [trusted_profiler].certificate.issued_to.organization</i>	<string>	Subject's organization	
<i>certificates.trusted_profilers [trusted_profiler].certificate.issued_to.email</i>	<string>	Subject's email	
<i>certificates.trusted_profilers [trusted_profiler].certificate.issued_by</i>	<object>	Certificate's details	
<i>certificates.trusted_profilers [trusted_profiler].certificate.issued_by.locality</i>	<string>	Subject's locality	
<i>certificates.trusted_profilers [trusted_profiler].certificate.issued_by.country</i>	<string>	Subject's state	
<i>certificates.trusted_profilers [trusted_profiler].certificate.issued_by.organization_unit</i>	<string>	Subject's organization unit	

<code>certificates.trusted_profilers</code> <code>[trusted_profiler].certificate.</code> <code>issued_by.state</code>	<code><string></code>	Subject's state (2 letters code)	
<code>certificates.trusted_profilers</code> <code>[trusted_profiler].certificate.</code> <code>issued_by.common_name</code>	<code><string></code>	Subject's common name	
<code>certificates.trusted_profilers</code> <code>[trusted_profiler].certificate.</code> <code>issued_by.organization</code>	<code><string></code>	Subject's organization	
<code>certificates.trusted_profilers</code> <code>[trusted_profiler].certificate.</code> <code>issued_by.email</code>	<code><string></code>	Subject's email	
<code>certificates.trusted_profilers</code> <code>[trusted_profiler].certificate.</code> <code>validity</code>	<code><object></code>	Certificate's validity info	
<code>certificates.trusted_profilers</code> <code>[trusted_profiler].certificate.</code> <code>validity.issued</code>	<code><timestamp></code>	Issuing date timestamp in Unix time format	Seconds since January 1, 1970
<code>certificates.trusted_profilers</code> <code>[trusted_profiler].certificate.</code> <code>validity.expire</code>	<code><timestamp></code>	Expire date timestamp in Unix time format	Seconds since January 1, 1970
<code>certificates.trusted_profilers</code> <code>[trusted_profiler].certificate.pem</code>	<code><string></code>	Contains the certificate in PEM format encode with Base64. This field contains only the public part of the certificate.	
<code>certificates.trusted_profilers</code> <code>[trusted_profiler].certificate.key</code>	<code><object></code>	Contains information about the certificate's key	
<code>certificates.trusted_profilers</code> <code>[trusted_profiler].certificate.key.</code> <code>algorithm</code>	<code><string></code>	Key algorithm	Values: RSA
<code>certificates.trusted_profilers</code> <code>[trusted_profiler].certificate.key.</code> <code>size</code>	<code><number></code>	Key length	
<code>certificates.trusted_profilers</code> <code>[trusted_profiler].certificate.</code> <code>fingerprint</code>	<code><number></code>	Certificate's fingerprint info	
<code>certificates.profiler_export_certificate</code>	<code><object></code>	Certificate's info	
<code>certificates.profiler_export_certificate.</code> <code>issued_to</code>	<code><object></code>	Certificate's details	
<code>certificates.profiler_export_certificate.</code> <code>issued_to.locality</code>	<code><string></code>	Subject's locality	
<code>certificates.profiler_export_certificate.</code> <code>issued_to.country</code>	<code><string></code>	Subject's state	
<code>certificates.profiler_export_certificate.</code> <code>issued_to.organization_unit</code>	<code><string></code>	Subject's organization unit	
<code>certificates.profiler_export_certificate.</code> <code>issued_to.state</code>	<code><string></code>	Subject's state (2 letters code)	
<code>certificates.profiler_export_certificate.</code> <code>issued_to.common_name</code>	<code><string></code>	Subject's common name	
<code>certificates.profiler_export_certificate.</code> <code>issued_to.organization</code>	<code><string></code>	Subject's organization	
<code>certificates.profiler_export_certificate.</code> <code>issued_to.email</code>	<code><string></code>	Subject's email	
<code>certificates.profiler_export_certificate.</code> <code>issued_by</code>	<code><object></code>	Certificate's details	
<code>certificates.profiler_export_certificate.</code> <code>issued_by.locality</code>	<code><string></code>	Subject's locality	
<code>certificates.profiler_export_certificate.</code> <code>issued_by.country</code>	<code><string></code>	Subject's state	
<code>certificates.profiler_export_certificate.</code> <code>issued_by.organization_unit</code>	<code><string></code>	Subject's organization unit	
<code>certificates.profiler_export_certificate.</code> <code>issued_by.state</code>	<code><string></code>	Subject's state (2 letters code)	
<code>certificates.profiler_export_certificate.</code> <code>issued_by.common_name</code>	<code><string></code>	Subject's common name	
<code>certificates.profiler_export_certificate.</code> <code>issued_by.organization</code>	<code><string></code>	Subject's organization	
<code>certificates.profiler_export_certificate.</code> <code>issued_by.email</code>	<code><string></code>	Subject's email	
<code>certificates.profiler_export_certificate.</code> <code>validity</code>	<code><object></code>	Certificate's validity info	
<code>certificates.profiler_export_certificate.</code> <code>validity.issued</code>	<code><timestamp></code>	Issuing date timestamp in Unix time format	Seconds since January 1, 1970

<code>certificates.profiler_export_certificate.validity.expire</code>	<code><timestamp></code>	Expire date timestamp in Unix time format	Seconds since January 1, 1970
<code>certificates.profiler_export_certificate.pem</code>	<code><string></code>	Contains the certificate in PEM format encode with Base64. This field contains only the public part of the certificate.	
<code>certificates.profiler_export_certificate.key</code>	<code><object></code>	Contains information about the certificate's key	
<code>certificates.profiler_export_certificate.key.algorithm</code>	<code><string></code>	Key algorithm	Values: RSA
<code>certificates.profiler_export_certificate.key.size</code>	<code><number></code>	Key length	
<code>certificates.profiler_export_certificate.fingerprint</code>	<code><number></code>	Certificate's fingerprint info	

certificates: Generate profiler export certificate

Request generation of new self-signed certificate and private key for profiler export

POST `https://{device}/api/shark/5.0/settings/certificates/profiler_export/generate`

Authorization

This request requires authorization.

Request Body

Provide a request body with the following structure:

JSON

```
{
  "issued_to": {
    "locality": string,
    "country": string,
    "organization_unit": string,
    "state": string,
    "organization": string,
    "email": string
  },
  "validity": {
    "days": number
  }
}
```

Example:

```
{
  "issued_to": {
    "locality": "San%20Francisco",
    "country": "US",
    "organization_unit": "CascadeUnit",
    "state": "CA",
    "organization": "Riverbed%20Technology",
    "email": "admin%40riverbed.com"
  },
  "validity": {
    "days": 365
  }
}
```

Property Name	Type	Description	Notes
<code>certificate_info</code>	<code><object></code>	Contains info used to generate a new self signed certificate (only for Web Server and Profiler Export certificates)	
<code>certificate_info.issued_to</code>	<code><object></code>	Contains data to generate a new self-signed certificate	
<code>certificate_info.issued_to.locality</code>	<code><string></code>	Subject's locality	
<code>certificate_info.issued_to.country</code>	<code><string></code>	Subject's country	
<code>certificate_info.issued_to.organization_unit</code>	<code><string></code>	Subject's organization unit	
<code>certificate_info.issued_to.state</code>	<code><string></code>	Subject's state (2 letters code)	
<code>certificate_info.issued_to.organization</code>	<code><string></code>	Subject's organization	
<code>certificate_info.issued_to.email</code>	<code><string></code>	Subject's email	
<code>certificate_info.validity</code>	<code><object></code>	Validity days for a new self signed certificate	

<code>certificate_info.validity.days</code>	<code><number></code>	Validity days for a new self signed certificate	
---	-----------------------------	---	--

Response Body

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

definitions: Update Service Response Time ports configuration

Update the list of configured Service Response Time ports

```
PUT https://{device}/api/shark/5.0/definitions/srt_ports
```

Authorization

This request requires authorization.

Request Body

Provide a request body with the following structure:

JSON

```
[  
  number  
]
```

Example:

```
[  
  20,  
  25,  
  69,  
  80,  
  139,  
  143,  
  443,  
  465  
]
```

Property Name	Type	Description	Notes
<code>srt_ports</code>	<code><array of <number>></code>	List of service response time ports	
<code>srt_ports[port]</code>	<code><number></code>		

Response Body

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

definitions: List Service Response Time ports

Get the list of configured IService Response Time ports

```
GET https://{device}/api/shark/5.0/definitions/srt_ports
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```
[  
  number  
]
```

Example:

```
[  
  20,  
  25,  
  69,  
  80,  
  139,  
  143,  
  443,  
  465  
]
```

Property Name	Type	Description	Notes
<i>srt_ports</i>	<array of <number>>	List of service response time ports	
<i>srt_ports</i> [port]	<number>		

definitions: List layer 4 mappings

Get the list of configured layer 4 mappings

```
GET https://{device}/api/shark/5.0/definitions/layer4_mappings
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```
[ layer4_mapping ]
```

Example:

```
[  
  {  
    "override": true,  
    "priority": 0,  
    "hosts": [  
      "192.168.140.18"  
    ],  
    "name": "My_server",  
    "ports": [  
      {  
        "port_range": "99",  
        "protocol": "TCP"  
      },  
      {  
        "port_range": "15",  
        "protocol": "TCP"  
      }  
    ]  
  },  
  {  
    "override": false,  
    "priority": 1,  
    "hosts": [  
      "192.168.141.1"  
    ],  
    "name": "My_server2",  
    "ports": [  
      {  
        "port_range": "1000",  
        "protocol": "UDP"  
      },  
      {  
        "port_range": "1001",  
        "protocol": "UDP"  
      }  
    ]  
  }  
]
```

Property Name	Type	Description	Notes
<i>layer4_mappings</i>	<i><array of <layer4_mapping>></i>	List of layer4 mapping definitions	
<i>layer4_mappings[layer4_mapping]</i>	<i><layer4_mapping></i>	Instance of a <layer4_mapping>	

definitions: Update port groups configuration

Update the list of configured port groups

```
PUT https://{device}/api/shark/5.0/definitions/port_groups
```

Authorization

This request requires authorization.

Request Body

Provide a request body with the following structure:

```
JSON
```

[*port_group*]

Example:

```
[
  {
    "priority": 0,
    "name": "Web",
    "ports": [
      {
        "port_range": "80",
        "protocol": "TCP"
      },
      {
        "port_range": "8080",
        "protocol": "TCP"
      },
      {
        "port_range": "443",
        "protocol": "TCP"
      }
    ]
  },
  {
    "priority": 1,
    "name": "Email",
    "ports": [
      {
        "port_range": "25",
        "protocol": "TCP"
      },
      {
        "port_range": "465",
        "protocol": "TCP"
      },
      {
        "port_range": "587",
        "protocol": "TCP"
      },
      {
        "port_range": "110",
        "protocol": "TCP"
      },
      {
        "port_range": "995",
        "protocol": "TCP"
      },
      {
        "port_range": "143",
        "protocol": "TCP"
      },
      {
        "port_range": "585",
        "protocol": "TCP"
      },
      {
        "port_range": "993",
        "protocol": "TCP"
      },
      {
        "port_range": "119",
        "protocol": "TCP"
      }
    ]
  }
]
```

Property Name	Type	Description	Notes
<i>port_groups</i>	<array of <port_group>>	List of port group definitions	
<i>port_groups</i> [<i>port_group</i>]	<port_group>	Instance of a <port_group>	

Response Body

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

definitions: Update custom applications configuration

Update the list of configured custom applications

```
PUT https://{device}/api/shark/5.0/definitions/custom_applications
```

Authorization

This request requires authorization.

Request Body

Provide a request body with the following structure:

JSON

[*custom_application*]

Example:

```
[
  {
    "name": "My_Bugzilla",
    "uri": "http://bugzilla.mydomain.com/"
  },
  {
    "name": "My_App1",
    "uri": "http://myserver.mydomain.com/app1/*"
  }
]
```

Property Name	Type	Description	Notes
<i>applications</i>	<array of <custom_application>>	List of custom L7 signature definitions	
<i>applications</i> [application]	<custom_application>	Instance of a <custom_application>	

Response Body

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

definitions: Update port names configuration

Update the list of configured port names

```
PUT https://{device}/api/shark/5.0/definitions/port_names
```

Authorization

This request requires authorization.

Request Body

Provide a request body with the following structure:

JSON

[*port_name*]

Example:

```
[
  {
    "udp": "http",
    "port": 80,
    "tcp": "http"
  },
  {
    "udp": "ms-sql-s",
    "port": 1433,
    "tcp": "ms-sql-s"
  }
]
```

Property Name	Type	Description	Notes
<i>port_names</i>	<array of <port_name>>	List of port name definitions	
<i>port_names</i> [port_name]	<port_name>	Instance of a <port_name>	

Response Body

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

definitions: List port groups

Get the list of configured port groups

```
GET https://{device}/api/shark/5.0/definitions/port_groups
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```
[ port_group ]
```

Example:

```
[
  {
    "priority": 0,
    "name": "Web",
    "ports": [
      {
        "port_range": "80",
        "protocol": "TCP"
      },
      {
        "port_range": "8080",
        "protocol": "TCP"
      },
      {
        "port_range": "443",
        "protocol": "TCP"
      }
    ]
  },
  {
    "priority": 1,
    "name": "Email",
    "ports": [
      {
        "port_range": "25",
        "protocol": "TCP"
      },
      {
        "port_range": "465",
        "protocol": "TCP"
      },
      {
        "port_range": "587",
        "protocol": "TCP"
      },
      {
        "port_range": "110",
        "protocol": "TCP"
      },
      {
        "port_range": "995",
        "protocol": "TCP"
      },
      {
        "port_range": "143",
        "protocol": "TCP"
      },
      {
        "port_range": "585",
        "protocol": "TCP"
      },
      {
        "port_range": "993",
        "protocol": "TCP"
      },
      {
        "port_range": "119",
        "protocol": "TCP"
      }
    ]
  }
]
```

Property Name	Type	Description	Notes
---------------	------	-------------	-------

<i>port_groups</i>	<array of <port_group>>	List of port group definitions	
<i>port_groups</i> {port_group}	<port_group>	Instance of a <port_group>	

definitions: List applications

Get the list of configured applications

GET <https://{device}/api/shark/5.0/definitions/applications>

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

[*application*]

Example:

```
[
  {
    "display_name": "Facebook",
    "type": 1,
    "description": "Facebook is a social networking service.",
    "id": 206
  },
  {
    "display_name": "Google",
    "type": 1,
    "description": "Internet searching on Google's search engine site google.com (or international equivalent) and/or encrypted traffic from other Google services.",
    "id": 259
  }
]
```

Property Name	Type	Description	Notes
<i>applications</i>	<array of <application>>	List of application definitions	
<i>applications</i> {application}	<application>	Instance of an <application>	

definitions: Update layer 4 mappings configuration

Update the list of configured layer 4 mappings

PUT https://{device}/api/shark/5.0/definitions/layer4_mappings

Authorization

This request requires authorization.

Request Body

Provide a request body with the following structure:

JSON

[[layer4_mapping](#)]

Example:

```
[
  {
    "override": true,
    "priority": 0,
    "hosts": [
      "192.168.140.18"
    ],
    "name": "My_server",
    "ports": [
      {
        "port_range": "99",
        "protocol": "TCP"
      },
      {
        "port_range": "15",
        "protocol": "TCP"
      }
    ]
  },
  {
    "override": false,
    "priority": 1,
    "hosts": [
      "192.168.141.1"
    ],
    "name": "My_server2",
    "ports": [
      {
        "port_range": "1000",
        "protocol": "UDP"
      },
      {
        "port_range": "1001",
        "protocol": "UDP"
      }
    ]
  }
]
```

Property Name	Type	Description	Notes
<i>layer4_mappings</i>	<array of <layer4_mapping>>	List of layer4 mapping definitions	
<i>layer4_mappings[layer4_mapping]</i>	<layer4_mapping>	Instance of a <layer4_mapping>	

Response Body

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

definitions: List custom applications

Get the list of configured custom applications

```
GET https://{device}/api/shark/5.0/definitions/custom_applications
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```
[ custom_application ]
```

Example:

```
[  
  {  
    "name": "My_Bugzilla",  
    "uri": "http://bugzilla.mydomain.com/"  
  },  
  {  
    "name": "My_App1",  
    "uri": "http://myserver.mydomain.com/app1/*"  
  }  
]
```

Property Name	Type	Description	Notes
<i>applications</i>	<array of <custom_application>>	List of custom L7 signature definitions	
<i>applications</i> [<i>application</i>]	<custom_application>	Instance of a <custom_application>	

definitions: List port names

Get the list of configured port names

```
GET https://{device}/api/shark/5.0/definitions/port_names
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```
[ port_name ]
```

Example:

```
[  
  {  
    "udp": "http",  
    "port": 80,  
    "tcp": "http"  
  },  
  {  
    "udp": "ms-sql-s",  
    "port": 1433,  
    "tcp": "ms-sql-s"  
  }  
]
```

Property Name	Type	Description	Notes
<i>port_names</i>	<array of <port_name>>	List of port name definitions	
<i>port_names</i> [<i>port_name</i>]	<port_name>	Instance of a <port_name>	

filesystem: Delete timeskew estimate

Delete time skew estimate results for multisegment file {file_id}.

```
DELETE https://{device}/api/shark/5.0/fs/{file_id}/fs/timeskew_estimate
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>file_id</i>	<string>	File path	

Response Body

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

filesystem: Move file or directory

Request move of file or directory resource {file_id}

```
POST https://{device}/api/shark/5.0/fs/{file_id}/move
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
file_id	<string>	File path	

Request Body

Provide a request body with the following structure:

JSON

```
{
  "destination": string
}
```

Example:

```
{
  "destination": "/admin/new-dir/http.cap"
}
```

Property Name	Type	Description	Notes
move	<object>	Contains the resource's destination id for a move operation	
move.destination	<string>	Resource's destination id	

Response Body

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

filesystem: Get file checksum

Obtain a checksum for a trace file.

```
GET https://{device}/api/shark/5.0/fs/{file_id}/checksum
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
file_id	<string>	File path	

Response Body

On success, the server returns a response body with the following structure:

JSON

```
{
  "method": string,
  "value": string
}
```

Example:

```
{
  "method": "SHA256",
  "value": "db8afb5138e5dcea93092ebcb8d20ab855e68b086d6541d68a942914e2a74372"
}
```

Property Name	Type	Description	Notes
<i>checksum</i>	<object>	Contains info about a checksum calculated on a trace file	
<i>checksum.method</i>	<string>	Checksum algorithm	Values: SHA256
<i>checksum.value</i>	<string>	Trace file's checksum	

filesystem: Create file or directory

Create trace file, merged file, multisegment file, or directory on the Shark. The file path is specified in the 'Content-Disposition' HTTP header and the file type to be created is specified using the 'Content-Type' HTTP header.

```
POST https://{device}/api/shark/5.0/fs/{directory_id}
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>directory_id</i>	<string>	The directory in which the file or directory is to be created	

HTTP Headers

Property Name	Type	Description	Notes
<i>Content-Type</i>	<string>	The type of object to be created	Values: application/x-vnd.tcpdump, x-shark-directory, application/json, or text/xml
<i>Content-Disposition</i>	<string>	The name of the file or directory to be created	

Request Body Variants

Create trace file

Content-Type: application/x-vnd.tcpdump

Provide a request body containing the file contents with content type application/x-vnd.tcpdump.

Create directory

Content-Type: x-shark-directory

Do not provide a request body.

Create merged or multisegment file

Content-Type: application/json or text/xml

Provide a request body with the following structure:

```
JSON
```

```

{
  "linked_sources": [
    {
      "path": string,
      "timeskew": number,
      "description": string,
      "default_source": boolean
    }
  ],
  "type": string
}

```

Example:

```

{
  "linked_sources": [
    {
      "path": "../2-router1-in.pcap",
      "description": "This source uses a relative path",
      "default_source": true
    },
    {
      "path": "fs/admin/4-router2-in.pcap",
      "description": "This source uses an absolute path",
      "timeskew": 100000000
    },
    {
      "path": "6-router3-in.pcap",
      "description": "This source uses a file name"
    }
  ],
  "type": "MULTISEGMENT_FILE"
}

```

Property Name	Type	Description	Notes
<i>request</i>	<object>	Contains info about a new multisegment or merged file	
<i>request.linked_sources</i>	<array of <object>>	Linked sources details list	
<i>request.linked_sources[linked_source]</i>	<object>		
<i>request.linked_sources[linked_source].path</i>	<string>	Linked source path. It could be either an absolute path (fs/ID) or a relative path starting from the aggregated file folder.	
<i>request.linked_sources[linked_source].timeskew</i>	<number>	It is the packets timestamps offset associated with the linked source	Optional
<i>request.linked_sources[linked_source].description</i>	<string>	A simple description field associated with the linked source	Optional
<i>request.linked_sources[linked_source].default_source</i>	<boolean>	The default source is the reference source in a multisegment file collection and it is used as reference for the time skew calculation	Optional
<i>request.type</i>	<string>	File type	Values: MULTISEGMENT_FILE, MERGED_FILE

Response Body

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

filesystem: Delete file

Delete file {file_id}. NOTE: If a file to be deleted is open for any reason, the delete operation will fail.

```
DELETE https://{device}/api/shark/5.0/fs/{file_id}
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>file_id</i>	<string>	File path	

Response Body

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

filesystem: List directory

filesystem: List directory

Get information on directory {directory_id}.

```
GET https://{device}/api/shark/5.0/fs/{directory_id}?details={string}&recursive={string}
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>details</i>	<string>	'true' for details on all files, 'false' otherwise.	Optional
<i>recursive</i>	<string>	'true' for recursive directory listing, 'false' otherwise.	Optional
<i>directory_id</i>	<string>	Directory path	

Response Body

Returns a *dir* data object.

filesystem: Get file index info

Get index information for trace file {file_id}.

```
GET https://{device}/api/shark/5.0/fs/{file_id}/index
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>file_id</i>	<string>	File path	

Response Body

Returns an *index_info* data object.

filesystem: Modify merged or multisegment file

Modify merged file or multisegment file {file_id} on the Shark.

```
PUT https://{device}/api/shark/5.0/fs/{file_id}
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>file_id</i>	<string>	File path	

Request Body

Provide a request body with the following structure:

```
JSON
```

```

{
  "linked_sources": [
    {
      "path": string,
      "timeskew": number,
      "description": string,
      "default_source": boolean
    }
  ],
  "type": string
}

```

Example:

```

{
  "linked_sources": [
    {
      "path": "../2-router1-in.pcap",
      "description": "This source uses a relative path",
      "default_source": true
    },
    {
      "path": "fs/admin/4-router2-in.pcap",
      "description": "This source uses an absolute path",
      "timeskew": 100000000
    },
    {
      "path": "6-router3-in.pcap",
      "description": "This source uses a file name"
    }
  ],
  "type": "MULTISEGMENT_FILE"
}

```

Property Name	Type	Description	Notes
<i>aggregated</i>	<object>	Contains info about a new multisegment or merged file	
<i>aggregated.linked_sources</i>	<array of <object>>	Linked sources details list	
<i>aggregated.linked_sources[linked_source]</i>	<object>		
<i>aggregated.linked_sources[linked_source].path</i>	<string>	Linked source path. It could be either an absolute path (fs/ID) or a relative path starting from the aggregated file folder.	
<i>aggregated.linked_sources[linked_source].timeskew</i>	<number>	It is the packets timestamps offset associated with the linked source	Optional
<i>aggregated.linked_sources[linked_source].description</i>	<string>	A simple description field associated with the linked source	Optional
<i>aggregated.linked_sources[linked_source].default_source</i>	<boolean>	The default source is the reference source in a multisegment file collection and it is used as reference for the time skew calculation	Optional
<i>aggregated.type</i>	<string>	File type	Values: MULTISEGMENT_FILE, MERGED_FILE

Response Body

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

filesystem: Download file contents

Download contents of trace file, merged file, or multisegment file {file_id}.

```
GET https://{device}/api/shark/5.0/fs/{file_id}/download
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>file_id</i>	<string>	File path	

Response Body

On success, the server returns a request body containing data with content type application/x-vnd.tcpdump or application/xml.

filesystem: List root directory

Get the contents of the root filesystem directory

```
GET https://{device}/api/shark/5.0/fs
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

[[dir](#)]

Example:

```
[
  {
    "files": [
      {
        "created": 1347053478,
        "modified": 1347053478,
        "type": "PCAPNG_FILE",
        "id": "/admin/http-ng.pcapng",
        "link_type": "DLT_EN10MB",
        "size": 149952
      },
      {
        "created": 1343026049,
        "modified": 1343026050,
        "type": "PCAP_FILE",
        "id": "/admin/prova.cap",
        "link_type": "DLT_EN10MB",
        "size": 145919
      }
    ],
    "dirs": [
      {
        "files": [
          {
            "created": 1342768036,
            "modified": 1342768037,
            "type": "PCAP_FILE",
            "id": "/admin/multisegment/2-router1-in.pcap",
            "link_type": "DLT_EN10MB",
            "size": 16246
          },
          {
            "created": 1342768038,
            "modified": 1342768038,
            "type": "PCAP_FILE",
            "id": "/admin/multisegment/4-router2-in.pcap",
            "link_type": "DLT_EN10MB",
            "size": 15988
          },
          {
            "created": 1342768038,
            "modified": 1342768038,
            "type": "PCAP_FILE",
            "id": "/admin/multisegment/6-router3-in.pcap",
            "link_type": "DLT_EN10MB",
            "size": 15988
          },
          {
            "created": 1342768079,
            "linked_sources": [
              {
                "path": "2-router1-in.pcap"
              },
              {
                "path": "4-router2-in.pcap"
              },
              {
                "path": "6-router3-in.pcap"
              }
            ]
          }
        ],
        "modified": 1348764826,
        "type": "MERGED_FILE",
        "id": "/admin/multisegment/merged.pvt",
        "link_type": "DLT_EN10MB",
        "size": 243
      }
    ]
  }
]
```



```

    },
    {
      "created": 1342768084,
      "linked_sources": [
        {
          "path": "2-router1-in.pcap",
          "default_source": true
        },
        {
          "path": "4-router2-in.pcap"
        },
        {
          "path": "fs/admin/multisegment/6-router3-in.pcap"
        }
      ],
      "modified": 1348764826,
      "type": "MULTISEGMENT_FILE",
      "id": "/admin/multisegment/multisegment.pvt",
      "link_type": "DLT_EN10MB",
      "size": 264
    }
  ],
  "dirs": [],
  "description": "This is a multi-segment file",
  "created": 1342767955,
  "modified": 1343077906,
  "id": "/admin/multisegment"
},
{
  "files": [
    {
      "created": 1342645581,
      "modified": 1342646988,
      "type": "PCAP_FILE",
      "id": "/admin/new-dir/http.cap",
      "link_type": "DLT_EN10MB",
      "size": 147456
    }
  ],
  "dirs": [],
  "description": "This is a custom folder",
  "created": 1348764627,
  "modified": 1348764743,
  "id": "/admin/new-dir"
}
],
"description": "My Files",
"created": 1341252038,
"modified": 1348764743,
"id": "/admin"
},
{
  "files": [],
  "dirs": [],
  "description": "normaluser Home Folder",
  "created": 1341252038,
  "modified": 1341252038,
  "id": "/normaluser"
},
{
  "files": [],
  "dirs": [],
  "description": "Files Shared with Administrators",
  "created": 1341252871,
  "modified": 1341252871,
  "id": "/Administrators"
},
{
  "files": [],
  "dirs": [],
  "description": "Files Shared with NormalUsers",
  "created": 1341252871,
  "modified": 1341252871,
  "id": "/NormalUsers"
},
{
  "files": [],
  "dirs": [],
  "description": "Files Shared with Viewers",
  "created": 1341252871,
  "modified": 1341252871,
  "id": "/Viewers"
}
]

```

Property Name	Type	Description	Notes
<i>fs</i>	<array of <dir>>	List of directories	
<i>fs[dir]</i>	<dir>	Instance of a <dir>	

filesystem: Create file index

Create index for trace file {file_id}

POST https://{device}/api/shark/5.0/fs/{file_id}/index

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>file_id</i>	<string>	File path	

Request Body

Do not provide a request body.

Response Body

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

filesystem: Delete file index

Delete index for trace file {file_id}.

DELETE https://{device}/api/shark/5.0/fs/{file_id}/index

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>file_id</i>	<string>	File path	

Response Body

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

filesystem: Delete directory

Delete user directory {directory_id}. If the directory is not empty, all files in the directory will be deleted as well. NOTE: If a file to be deleted is open for any reason, the delete operation will fail.

DELETE https://{device}/api/shark/5.0/fs/{directory_id}

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>directory_id</i>	<string>	Directory path	

Response Body

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

filesystem: Get timeskew estimate results

Time skew information for multisegment file {file_id}

GET https://{device}/api/shark/5.0/fs/{file_id}/timeskew_estimate

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>file_id</i>	<i><string></i>	File path	

Response Body

On success, the server returns a response body with the following structure:

JSON

```
{
  "status": {
    "first_invalid_timestamp": timestamp-hp,
    "state": string,
    "duplicated_count": number,
    "invalid_source_index": number
  },
  "results": [
    {
      "timeskew": number,
      "source_index": number
    }
  ]
}
```

Example:

```
{
  "status": {
    "state": "OK"
  },
  "results": [
    {
      "timeskew": 0,
      "source_index": 1
    },
    {
      "timeskew": -1000000,
      "source_index": 2
    },
    {
      "timeskew": 30654891,
      "source_index": 3
    }
  ]
}
```

Property Name	Type	Description	Notes
<i>timeskew_estimate</i>	<i><object></i>	Time skew estimate information	
<i>timeskew_estimate.status</i>	<i><object></i>	Status information for the time skew estimate	
<i>timeskew_estimate.status.first_invalid_timestamp</i>	<i><timestamp-hp></i>	First timestamp causing the <code>TIMESTAMP_WARNING</code> code	
<i>timeskew_estimate.status.state</i>	<i><string></i>		Values: <code>EMPTY</code> , <code>COMPUTING</code> , <code>NO_PACKETS</code> , <code>UNIDIRECTIONAL</code> , <code>TIMESTAMP_WARNING</code> , <code>DUPLICATE_WARNING</code> , <code>OK</code>
<i>timeskew_estimate.status.duplicated_count</i>	<i><number></i>	Number of packets with the same timestamp in different capture points. Check this field in order to estimate if this is a real issue or not: if the number of packets experiencing this problem is high probably at least two files contain the same packets, otherwise it means that for some packets the timeskew observed makes the delay becomes zero ($\text{timeskew} = \text{delay for that packet}$).	Optional
<i>timeskew_estimate.status.invalid_source_index</i>	<i><number></i>	Index of the file causing the <code>TIMESTAMP_WARNING</code> code	Optional
<i>timeskew_estimate.results</i>	<i><array of <object>></i>	List of linked sources	Optional
<i>timeskew_estimate.results[result]</i>	<i><object></i>	Time skew information for a linked source	
<i>timeskew_estimate.results[result].timeskew</i>	<i><number></i>	Estimated time skew compared to the default source	
<i>timeskew_estimate.results[result].source_index</i>	<i><number></i>	Index of the linked source	

filesystem: Create timeskew estimate

Start a timeskew estimation process for multisegment file {file_id}.

```
PUT https://{device}/api/shark/5.0/fs/{file_id}/fs/timeskew_estimate?packet_count={number}
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>packet_count</i>	<number>	Maximum number of packets to process	Optional
<i>file_id</i>	<string>	File path	

Request Body

Do not provide a request body.

Response Body

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

filesystem: Get file info

Get descriptive information for file or directory {file_id}

```
GET https://{device}/api/shark/5.0/fs/{file_id}
```

Authorization

This request requires authorization.

Parameters

Property Name	Type	Description	Notes
<i>file_id</i>	<string>	File or directory path	

Response Body

Returns a *file* data object.

licenses: Get license detail

Get information on license {license_key}.

```
GET https://{device}/api/shark/5.0/settings/licenses/{license_key}
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

```
JSON
```

```

{
  "status": string,
  "valid_from": timestamp,
  "valid_to": timestamp,
  "feature_name": string,
  "key": string,
  "is_platform": boolean,
  "feature_description": string
}

```

Example:

```

{
  "status": "VALID",
  "valid_from": "no_limit",
  "valid_to": "no_limit",
  "feature_name": "VLAB",
  "key": "LK1-VLAB-0000-0000-1-2644-76FE-6436",
  "is_platform": false,
  "feature_description": "VLAB License, Max Limits"
}

```

Property Name	Type	Description	Notes
<i>license</i>	<object>	Information for a Shark license	
<i>license.status</i>	<string>	Status of this license	Values: INVALID, VALID, VALID_SOON, FUTURE, EXPIRES_SOON, EXPIRED, SUPERSEDED, UNKNOWN
<i>license.valid_from</i>	<timestamp>	Date/time (seconds from epoch) at which this license becomes valid (0 if always valid)	Seconds since January 1, 1970
<i>license.valid_to</i>	<timestamp>	Date/time (seconds from epoch) at which this license expires (0 if always valid)	Seconds since January 1, 1970
<i>license.feature_name</i>	<string>	Feature covered by this license	
<i>license.key</i>	<string>	License key for this license	
<i>license.is_platform</i>	<boolean>	'true' if this is a platform license	
<i>license.feature_description</i>	<string>	Description of feature covered by this license	

licenses: Delete license

Delete license {license_key}.

```
DELETE https://{device}/api/shark/5.0/settings/licenses/{license_key}
```

Authorization

This request requires authorization.

Response Body

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

licenses: Add licenses

Add a set of licenses to the system.

```
POST https://{device}/api/shark/5.0/settings/licenses
```

Authorization

This request requires authorization.

Request Body

Provide a request body with the following structure:

JSON

```
[
  string
]
Example:
[
  "LK1-FEAT1-0000-0000-1-2644-76FE-6436"
]
```

Property Name	Type	Description	Notes
<i>licenses</i>	<array of <string>>	List of license keys to add to the system	
<i>licenses[license]</i>	<string>		

Response Body

On success, the server returns a response body with the following structure:

JSON

```
[
  {
    "url": string,
    "status": string,
    "key": string
  }
]
Example:
[
  {
    "status": "VALID",
    "url": "/api/shark/4.0/settings/licenses/LK1-VLAB-0000-0000-1-2644-76FE-6436.json",
    "key": "LK1-FEAT1-0000-0000-1-2644-76FE-6436"
  }
]
```

Property Name	Type	Description	Notes
<i>licenses</i>	<array of <object>>	List of new licenses added to the system	
<i>licenses[license]</i>	<object>	Description of a new license added to the system	
<i>licenses[license].url</i>	<string>	Resource URI for the new license key	
<i>licenses[license].status</i>	<string>	Status of the new license	Values: INVALID, VALID, VALID_SOON, FUTURE, EXPIRES_SOON, EXPIRED, SUPERSEDED, UNKNOWN
<i>licenses[license].key</i>	<string>	New license key added to the system	

licenses: List licenses

Get the list of licenses on the system.

```
GET https://{device}/api/shark/5.0/settings/licenses
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```
[
  {
    "status": string,
    "valid_from": timestamp,
    "valid_to": timestamp,
    "feature_name": string,
    "key": string,
    "is_platform": boolean,
    "feature_description": string
  }
]
```

Example:

```
[
  {
    "status": "VALID",
    "valid_from": "no_limit",
    "valid_to": "no_limit",
    "feature_name": "VLAB",
    "key": "LK1-FEAT1-0000-0000-1-2644-76FE-6436",
    "is_platform": false,
    "feature_description": "FEAT1 License, Max Limits"
  }
]
```

Property Name	Type	Description	Notes
<i>licenses</i>	<array of <object>>	List of licenses currently in system	
<i>licenses[license]</i>	<object>	Information for a Shark license	
<i>licenses[license].status</i>	<string>	Status of this license	Values: INVALID, VALID, VALID_SOON, FUTURE, EXPIRES_SOON, EXPIRED, SUPERSEDED, UNKNOWN
<i>licenses[license].valid_from</i>	<timestamp>	Date/time (seconds from epoch) at which this license becomes valid (0 if always valid)	Seconds since January 1, 1970
<i>licenses[license].valid_to</i>	<timestamp>	Date/time (seconds from epoch) at which this license expires (0 if always valid)	Seconds since January 1, 1970
<i>licenses[license].feature_name</i>	<string>	Feature covered by this license	
<i>licenses[license].key</i>	<string>	License key for this license	
<i>licenses[license].is_platform</i>	<boolean>	'true' if this is a platform license	
<i>licenses[license].feature_description</i>	<string>	Description of feature covered by this license	

licenses: Generate license request key

Request license request code.

POST <https://{device}/api/shark/5.0/settings/licenses/request>

Authorization

This request requires authorization.

Request Body

Provide a request body with the following structure:

JSON

```
{
  "token": string
}
```

Example:

```
{
  "token": "SHKDSK50-67A9DA741BE548DA151FA1F3"
}
```

Property Name	Type	Description	Notes
<i>license_token</i>	<object>	Submit a new license request	
<i>license_token.token</i>	<string>	License request token (obtained from Riverbed customer support)	

Response Body

On success, the server returns a response body with the following structure:

JSON

```
{
  "license_req": string
}
```

Example:

```
{
  "license_req": "shark.localdom-C1239NVM-GUGQSGVL-FLHVVEQM-CQLHS1FF-FPYU9U5L-417PUN6K-9WGPHV0A-JPKS8KG6"
}
```

Property Name	Type	Description	Notes
<i>license_request</i>	<object>		
<i>license_request.license_req</i>	<string>	License request string (to be submitted to Riverbed customer support)	

licenses: Get license status

Get current licensing status of this Shark VE.

```
GET https://{device}/api/shark/5.0/settings/licenses/status
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```
{
  "numprofilers": number,
  "packet_storage_size": number,
  "enterprise_pilot_level": number,
  "application_status": string,
  "profiler_export_capacity": number
}
```

Example:

```
{
  "application_status": "LICENSED",
  "numprofilers": 2,
  "profiler_export_capacity": 200,
  "packet_storage_size": 50,
  "enterprise_pilot_level": 0
}
```

Property Name	Type	Description	Notes
<i>license_status</i>	<object>	License status information for this Shark VE	
<i>license_status.numprofilers</i>	<number>	Number of profilers supported for export	
<i>license_status.packet_storage_size</i>	<number>	Packet storage capacity (GB)	
<i>license_status.enterprise_pilot_level</i>	<number>	Enterprise Pilot level	
<i>license_status.application_status</i>	<string>	License status for this Shark VE	Values: LICENSED_PHYSICAL, LICENSED, UNLICENSED, STATUS_CHANGED, UNKNOWN
<i>license_status.profiler_export_capacity</i>	<number>	Export capacity (MBPS) for profiler export	

stats: Get profiler export stats

Get profiler export information

```
GET https://{device}/api/shark/5.0/stats/profiler_export
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```
{
  "last_minute": {
    "exported": {
      "ip_bytes": number,
      "packets": number,
      "flows": number
    },
    "rejected": {
      "ip_bytes": number,
      "packets": number,
      "flows": number
    }
  },
  "last_week": {
    "exported": {
      "ip_bytes": number,
      "packets": number,
      "average_flows": number,
      "flows": number,
      "peak_flows": number
    },
    "rejected": {
      "ip_bytes": number,
      "packets": number,
      "average_flows": number,
      "flows": number,
      "peak_flows": number
    }
  }
}
```

Example:

```
{
  "last_minute": {
    "exported": {
      "ip_bytes": 7945576960,
      "packets": 31037410,
      "flows": 973309
    },
    "rejected": {
      "ip_bytes": 0,
      "packets": 0,
      "flows": 0
    }
  },
  "last_week": {
    "exported": {
      "ip_bytes": 6491276748032,
      "packets": 25356549797,
      "flows": 795175093,
      "average_flows": 78886,
      "peak_flows": 1000000
    },
    "rejected": {
      "ip_bytes": 13589455872,
      "packets": 53083812,
      "flows": 1664668,
      "average_flows": 165,
      "peak_flows": 600000
    }
  }
}
```

Property Name	Type	Description	Notes
<i>profiler_export_stats</i>	<object>	Statistics on the Profiler Export	
<i>profiler_export_stats.last_minute</i>	<object>	Statistics on the data exported in the last minute	
<i>profiler_export_stats.last_minute.exported</i>	<object>	Values sent to the profiler/s in the last minute	
<i>profiler_export_stats.last_minute.exported.ip_bytes</i>	<number>	Cumulative number of IP bytes (IP header included) for the exported flows	
<i>profiler_export_stats.last_minute.exported.packets</i>	<number>	Cumulative number of packets for the exported flows	
<i>profiler_export_stats.last_minute.exported.flows</i>	<number>	Number of exported flows	

<code>profiler_export_stats.last_minute.rejected</code>	<code><object></code>	Values analyzed but not sent to the profiler/s in the last minute	
<code>profiler_export_stats.last_minute.rejected.ip_bytes</code>	<code><number></code>	Cumulative number of IP bytes (IP header included) for the rejected flows	
<code>profiler_export_stats.last_minute.rejected.packets</code>	<code><number></code>	Cumulative number of packets for the rejected flows	
<code>profiler_export_stats.last_minute.rejected.flows</code>	<code><number></code>	Number of rejected flows	
<code>profiler_export_stats.last_week</code>	<code><object></code>	Statistics on the data exported in the last week	
<code>profiler_export_stats.last_week.exported</code>	<code><object></code>	Values sent to the profiler/s in the last week	
<code>profiler_export_stats.last_week.exported.ip_bytes</code>	<code><number></code>	Cumulative number of IP bytes (IP header included) for the exported flows	
<code>profiler_export_stats.last_week.exported.packets</code>	<code><number></code>	Cumulative number of packets for the exported flows	
<code>profiler_export_stats.last_week.exported.average_flows</code>	<code><number></code>	Average number of flows exported in the last week	
<code>profiler_export_stats.last_week.exported.flows</code>	<code><number></code>	Number of exported flows	
<code>profiler_export_stats.last_week.exported.peak_flows</code>	<code><number></code>	Max number of flows exported in a minute in the last week	
<code>profiler_export_stats.last_week.rejected</code>	<code><object></code>	Values analyzed but not sent to the profiler/s in the last week	
<code>profiler_export_stats.last_week.rejected.ip_bytes</code>	<code><number></code>	Cumulative number of IP bytes (IP header included) for the rejected flows	
<code>profiler_export_stats.last_week.rejected.packets</code>	<code><number></code>	Cumulative number of packets for the rejected flows	
<code>profiler_export_stats.last_week.rejected.average_flows</code>	<code><number></code>	Average number of flows rejected in the last week	
<code>profiler_export_stats.last_week.rejected.flows</code>	<code><number></code>	Number of rejected flows	
<code>profiler_export_stats.last_week.rejected.peak_flows</code>	<code><number></code>	Max number of flows rejected in a minute in the last week	

stats: Get memory stats

Get system memory information

GET `https://{device}/api/shark/5.0/stats/memory`

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```
{
  "status": string,
  "available": number,
  "used": number,
  "reserved": number,
  "by_category": [
    {
      "bytes": number,
      "name": string,
      "allocations": number
    }
  ],
  "by_handle": [
    {
      "by_category": [
        {
          "bytes": number,
          "name": string,
          "allocations": number
        }
      ],
      "name": string
    }
  ],
  "total": number
}
```

```
}
```

Example:

```
{
  "status": "OK",
  "available": 4658311920,
  "used": 1603742992,
  "reserved": 1407188992,
  "by_category": [
    {
      "bytes": 153696,
      "name": "DATAMATRIX",
      "allocations": 12
    },
    {
      "bytes": 264,
      "name": "DBTABLE",
      "allocations": 5
    },
    {
      "bytes": 41946816,
      "name": "DEMUXER",
      "allocations": 10
    },
    {
      "bytes": 181560,
      "name": "DNS_RESOLVER",
      "allocations": 9
    },
    {
      "bytes": 196554000,
      "name": "GLOBAL",
      "allocations": 75053
    },
    {
      "bytes": 153808,
      "name": "IP_FRAGMENTATION",
      "allocations": 6
    },
    {
      "bytes": 1120,
      "name": "MEMORY_REPOSITORY",
      "allocations": 2
    },
    {
      "bytes": 23581312,
      "name": "NETFLOW",
      "allocations": 75006
    },
    {
      "bytes": 130535424,
      "name": "PACKET",
      "allocations": 3
    }
  ],
  "by_handle": [
    {
      "by_category": [
        {
          "bytes": 88680,
          "name": "DATAMATRIX",
          "allocations": 7
        },
        {
          "bytes": 264,
          "name": "DBTABLE",
          "allocations": 5
        },
        {
          "bytes": 165848,
          "name": "GLOBAL",
          "allocations": 15
        },
        {
          "bytes": 76904,
          "name": "IP_FRAGMENTATION",
          "allocations": 3
        }
      ],
      "name": "00000001"
    },
    {
      "by_category": [
        {
          "bytes": 65016,
          "name": "DATAMATRIX",
          "allocations": 5
        }
      ]
    }
  ]
}
```

```

},
{
  "bytes": 141920,
  "name": "GLOBAL",
  "allocations": 8
},
{
  "bytes": 76904,
  "name": "IP_FRAGMENTATION",
  "allocations": 3
}
],
"name": "FFFFFF01"
}
].
"total": 6262054912
}

```

Property Name	Type	Description	Notes
<i>memory</i>	<object>		
<i>memory.status</i>	<string>	Memory usage status	Values: OK, WARNING, CRITICAL, CONFIGURATION_ERROR
<i>memory.available</i>	<number>	Memory available for use	
<i>memory.used</i>	<number>	Memory used by the system	
<i>memory.reserved</i>	<number>	Reserved memory	Typically reserved by the packet recorder
<i>memory.by_category</i>	<array of <object>>	List of memory usage for each category	
<i>memory.by_category[category]</i>	<object>	Memory usage for a single category	
<i>memory.by_category[category].bytes</i>	<number>	Allocated bytes for this category	
<i>memory.by_category[category].name</i>	<string>	Category name	
<i>memory.by_category[category].allocations</i>	<number>	Number of memory allocation operations for this category	
<i>memory.by_handle</i>	<array of <object>>	List of memory usage for each handle (i.e. view, etc.)	
<i>memory.by_handle[handle]</i>	<object>	Memory usage for a single handle	
<i>memory.by_handle[handle].by_category</i>	<array of <object>>	List of memory usage in each category for the given handle	
<i>memory.by_handle[handle].by_category [category]</i>	<object>	Memory usage for a single category	
<i>memory.by_handle[handle].by_category [category].bytes</i>	<number>	Allocated bytes for this category	
<i>memory.by_handle[handle].by_category [category].name</i>	<string>	Category name	
<i>memory.by_handle[handle].by_category [category].allocations</i>	<number>	Number of memory allocation operations for this category	
<i>memory.by_handle[handle].name</i>	<string>	Handle name	
<i>memory.total</i>	<number>	Total memory on the system	

stats: Get storage stats

Get system storage information

```
GET https://{device}/api/shark/5.0/stats/storage
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```

{
  "packet_storage": {
    "status": string,
    "used": number,
    "reserved": number,
    "unused": number,
    "unallocated": number,
    "allocated": number,
    "total": number
  },
  "os_storage": {
    "status": string,
    "index_storage": {
      "unused": number,
      "allocated": number,
      "total": number,
      "used": number,
      "unallocated": number
    },
    "disk_storage": {
      "unused": number,
      "total": number,
      "used": number
    }
  }
}

```

Example:

```

{
  "packet_storage": {
    "status": "OK",
    "used": 0,
    "reserved": 0,
    "unused": 0,
    "unallocated": 3999688294400,
    "allocated": 0,
    "total": 3999688294400
  },
  "os_storage": {
    "status": "OK",
    "index_storage": {
      "unused": 0,
      "allocated": 0,
      "total": 457108365312,
      "used": 0,
      "unallocated": 457108365312
    },
    "disk_storage": {
      "unused": 457108365312,
      "total": 457360449536,
      "used": 252084224
    }
  }
}

```

Property Name	Type	Description	Notes
storage	<object>		
storage.packet_storage	<object>	Packet storage statistics	
storage.packet_storage.status	<string>	Packet storage status	Values: OK, DISK_FULL, CORRUPTED, HW_FAILURE, UNLICENSED, LICENSE_EXCEEDED, UNKNOWN
storage.packet_storage.used	<number>	Packet storage space currently being used	
storage.packet_storage.reserved	<number>	Packet storage reserved size	
storage.packet_storage.unused	<number>	Allocated but not yet used packet storage space	
storage.packet_storage.unallocated	<number>	Unallocated packet storage size	
storage.packet_storage.allocated	<number>	Allocated packet storage size	
storage.packet_storage.total	<number>	Total packet storage size	
storage.os_storage	<object>	System storage statistics	
storage.os_storage.status	<string>	System storage status	Values: OK, WARNING, CRITICAL, UNKNOWN
storage.os_storage.index_storage	<object>	Index storage status	
storage.os_storage.index_storage.unused	<number>	Unused index storage space	
storage.os_storage.index_storage.allocated	<number>	Allocated index storage space by all the existing jobs	
storage.os_storage.index_storage.total	<number>	Total index storage size (unallocated + allocated)	
storage.os_storage.index_storage.used	<number>	Used index storage space	

<code>storage.os_storage.index_storage.unallocated</code>	<code><number></code>	Available index storage space	
<code>storage.os_storage.disk_storage</code>	<code><object></code>	System disk status	
<code>storage.os_storage.disk_storage.unused</code>	<code><number></code>	System disk storage not being used	
<code>storage.os_storage.disk_storage.total</code>	<code><number></code>	Total system disk storage size	
<code>storage.os_storage.disk_storage.used</code>	<code><number></code>	System disk storage currently being used	

settings: Update firewall settings

Update firewall settings.

PUT `https://{device}/api/shark/5.0/settings/firewall`

Authorization

This request requires authorization.

Request Body

Provide a request body with the following structure:

JSON

```
{
  "rules": [
    {
      "action": string,
      "source": string,
      "protocol": string,
      "description": string,
      "dest_port": number
    }
  ],
  "firewall_enabled": boolean,
  "default_policy": string
}
```

Example:

```
{
  "rules": [
    {
      "action": "ACCEPT",
      "source": "10.0.0.1",
      "protocol": "TCP",
      "description": "Allow HTTPS for all the hosts",
      "dest_port": 65535
    },
    {
      "action": "ACCEPT",
      "protocol": "TCP",
      "description": "Allow SSH for all the hosts",
      "dest_port": 22
    },
    {
      "action": "ACCEPT",
      "protocol": "ICMP",
      "description": "Allow ICMP for all the hosts"
    }
  ],
  "firewall_enabled": true,
  "default_policy": "DROP"
}
```

Property Name	Type	Description	Notes
<code>firewall_settings</code>	<code><object></code>	Firewall configuration	
<code>firewall_settings.rules</code>	<code><array of <object>></code>	Rules list	
<code>firewall_settings.rules[rule]</code>	<code><object></code>		
<code>firewall_settings.rules[rule].action</code>	<code><string></code>	Rule action, what the firewall should do with the packet when it matches the rule	Values: ACCEPT, DROP, LOG_ACCEPT, LOG_DROP
<code>firewall_settings.rules[rule].source</code>	<code><string></code>	Rule IPv4 source address. It can contain a netmasks specified as CIDR format or as IPv4 address.	Optional
<code>firewall_settings.rules[rule].protocol</code>	<code><string></code>	Rule protocol	Optional; Values: TCP, UDP, ICMP, ALL
<code>firewall_settings.rules[rule].description</code>	<code><string></code>	Rule description	Optional

<code>firewall_settings.rules[rule].dest_port</code>	<code><number></code>	Rule destination port	Optional
<code>firewall_settings.firewall_enabled</code>	<code><boolean></code>	Enables or disable the firewall	
<code>firewall_settings.default_policy</code>	<code><string></code>	Firewall default policy	Values: ACCEPT, DROP

Response Body

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

settings: Get snmp settings

Get SNMP settings.

```
GET https://{device}/api/shark/5.0/settings/snmp
```

Authorization

This request requires authorization.

Response Body

Returns a `snmp_settings` data object.

settings: Update profiler export settings

Update profiler export settings.

```
PUT https://{device}/api/shark/5.0/settings/profiler_export
```

Authorization

This request requires authorization.

Request Body

Provide a `profilerexport_settings` data object.

Response Body

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

settings: Get profiler export settings

Get profiler export settings.

```
GET https://{device}/api/shark/5.0/settings/profiler_export
```

Authorization

This request requires authorization.

Response Body

Returns a `profilerexport_settings` data object.

settings: Update authentication settings

Update authentication settings.

```
PUT https://{device}/api/shark/5.0/settings/auth
```

Authorization

This request requires authorization.

Request Body

Provide an `auth_settings` data object.

Response Body

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

settings: Update basic settings

Update basic settings.

```
PUT https://{device}/api/shark/5.0/settings/basic
```

Authorization

This request requires authorization.

Request Body

Provide a [basic_settings](#) data object.

Response Body

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

settings: Get authentication settings

Get authentication settings.

```
GET https://{device}/api/shark/5.0/settings/auth
```

Authorization

This request requires authorization.

Response Body

Returns an [auth_settings](#) data object.

settings: Update cors domains

Update the list of domains enabled for Cross Origin Resource Sharing.

```
PUT https://{device}/api/shark/5.0/settings/cors_domains
```

Authorization

This request requires authorization.

Request Body

Provide a request body with the following structure:

JSON

```
[  
  string  
]
```

Example:

```
[  
  "http://example_domain1.com",  
  "http://example_domain2.com"  
]
```

Property Name	Type	Description	Notes
<code>cors_domains</code>	<code><array of <string>></code>	List of CORS (Cross-Origin Resource Sharing) domains	
<code>cors_domains[domain]</code>	<code><string></code>		

Response Body

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

settings: Get basic settings

Get basic settings.

```
GET https://{device}/api/shark/5.0/settings/basic
```

Authorization

This request requires authorization.

Response Body

Returns a *basic_settings* data object.

settings: Update snmp settings

Update SNMP settings.

```
PUT https://{device}/api/shark/5.0/settings/snmp
```

Authorization

This request requires authorization.

Request Body

Provide a *snmp_settings* data object.

Response Body

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

settings: Get firewall settings

Get firewall settings.

```
GET https://{device}/api/shark/5.0/settings/firewall
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

```
JSON
```

```

{
  "rules": [
    {
      "action": string,
      "source": string,
      "protocol": string,
      "description": string,
      "dest_port": number
    }
  ],
  "firewall_enabled": boolean,
  "default_policy": string
}

```

Example:

```

{
  "rules": [
    {
      "action": "ACCEPT",
      "source": "10.0.0.1",
      "protocol": "TCP",
      "description": "Allow HTTPS for all the hosts",
      "dest_port": 65535
    },
    {
      "action": "ACCEPT",
      "protocol": "TCP",
      "description": "Allow SSH for all the hosts",
      "dest_port": 22
    },
    {
      "action": "ACCEPT",
      "protocol": "ICMP",
      "description": "Allow ICMP for all the hosts"
    }
  ],
  "firewall_enabled": true,
  "default_policy": "DROP"
}

```

Property Name	Type	Description	Notes
<code>firewall_settings</code>	<code><object></code>	Firewall configuration	
<code>firewall_settings.rules</code>	<code><array of <object>></code>	Rules list	
<code>firewall_settings.rules[rule]</code>	<code><object></code>		
<code>firewall_settings.rules[rule].action</code>	<code><string></code>	Rule action, what the firewall should do with the packet when it matches the rule	Values: ACCEPT, DROP, LOG_ACCEPT, LOG_DROP
<code>firewall_settings.rules[rule].source</code>	<code><string></code>	Rule IPV4 source address. It can contain a netmasks specified as CIDR format or as IPV4 address.	Optional
<code>firewall_settings.rules[rule].protocol</code>	<code><string></code>	Rule protocol	Optional; Values: TCP, UDP, ICMP, ALL
<code>firewall_settings.rules[rule].description</code>	<code><string></code>	Rule description	Optional
<code>firewall_settings.rules[rule].dest_port</code>	<code><number></code>	Rule destination port	Optional
<code>firewall_settings.firewall_enabled</code>	<code><boolean></code>	Enables or disable the firewall	
<code>firewall_settings.default_policy</code>	<code><string></code>	Firewall default policy	Values: ACCEPT, DROP

settings: List cors domains

Get the list of domains enabled for Cross Origin Resource Sharing.

```
GET https://{device}/api/shark/5.0/settings/cors_domains
```

Authorization

This request requires authorization.

Response Body

On success, the server returns a response body with the following structure:

JSON

```
[
  string
]
```

Example:

```
[
  "http://example_domain1.com",
  "http://example_domain2.com"
]
```

Property Name	Type	Description	Notes
<i>cors_domains</i>	<array of <string>>	List of CORS (Cross-Origin Resource Sharing) domains	
<i>cors_domains</i> [domain]	<string>		

settings: Update audit settings

Update audit settings.

```
PUT https://{device}/api/shark/5.0/settings/audit
```

Authorization

This request requires authorization.

Request Body

Provide an [audit_settings](#) data object.

Response Body

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

settings: Get notification settings

Management daemon configuration parameters.

```
GET https://{device}/api/shark/5.0/settings/notification
```

Authorization

This request requires authorization.

Response Body

Returns a [notification_settings](#) data object.

settings: Get audit settings

Get audit settings.

```
GET https://{device}/api/shark/5.0/settings/audit
```

Authorization

This request requires authorization.

Response Body

Returns an [audit_settings](#) data object.

settings: Update notification settings

Update management daemon configuration parameters.

```
PUT https://{device}/api/shark/5.0/settings/notification
```

Authorization

This request requires authorization.

Request Body

Provide a [notification_settings](#) data object.

Response Body

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

Data types

application

JSON

```
{
  "type": number,
  "display_name": string,
  "description": string,
  "id": number
}
```

Example:

```
{
  "display_name": "Facebook",
  "type": 1,
  "description": "Facebook is a social networking service.",
  "id": 206
}
```

Property Name	Type	Description	Notes
<i>application</i>	<object>		
<i>application.type</i>	<number>	Application type, it can be either '1' for system applications or '2' for custom applications	
<i>application.display_name</i>	<string>	Application name	
<i>application.description</i>	<string>	Application description	Optional
<i>application.id</i>	<number>	Application unique identifier	

audit_settings

Audit system settings

JSON

```
{
  "audit_categories": [
    {
      "min_remote_server_level": string,
      "audit_type": string,
      "min_syslog_level": string,
      "name": string,
      "description": string
    }
  ]
}
```

Example:

```
{
  "audit_categories": [
    {
      "min_remote_server_level": "DISABLED",
      "audit_type": "AUTHENTICATION",
      "description": "Audits login attempts.",
      "name": "AUTHENTICATION",
      "min_syslog_level": "INFO"
    },
    {
      "min_remote_server_level": "DISABLED",
      "audit_type": "CAPTURE_JOBS",
      "description": "Audits capture jobs.",
      "name": "CAPTURE_JOBS",
      "min_syslog_level": "INFO"
    }
  ]
}
```

```

},
{
  "min_remote_server_level": "DISABLED",
  "audit_type": "CRYPTOGRAPHY",
  "description": "Audits cryptographic functions.",
  "name": "CRYPTOGRAPHY",
  "min_syslog_level": "INFO"
},
{
  "min_remote_server_level": "DISABLED",
  "audit_type": "COMMUNICATIONS",
  "description": "Audits HTTPS requests.",
  "name": "COMMUNICATIONS",
  "min_syslog_level": "DISABLED"
},
{
  "min_remote_server_level": "DISABLED",
  "audit_type": "FILE_OPERATIONS",
  "description": "Audits file operations.",
  "name": "FILE OPERATIONS",
  "min_syslog_level": "INFO"
},
{
  "min_remote_server_level": "DISABLED",
  "audit_type": "LICENSING",
  "description": "Audits license operations.",
  "name": "LICENSING",
  "min_syslog_level": "INFO"
},
{
  "min_remote_server_level": "DISABLED",
  "audit_type": "SETTINGS",
  "description": "Audits modification to settings.",
  "name": "SETTINGS",
  "min_syslog_level": "INFO"
},
{
  "min_remote_server_level": "DISABLED",
  "audit_type": "SYSTEM_OPERATIONS",
  "description": "Audits system operations.",
  "name": "SYSTEM OPERATIONS",
  "min_syslog_level": "INFO"
},
{
  "min_remote_server_level": "DISABLED",
  "audit_type": "USER_MANAGEMENT",
  "description": "Audits users and groups setting.",
  "name": "USER MANAGEMENT",
  "min_syslog_level": "INFO"
},
{
  "min_remote_server_level": "DISABLED",
  "audit_type": "VIEWS",
  "description": "Audits view operations.",
  "name": "VIEWS",
  "min_syslog_level": "INFO"
},
{
  "min_remote_server_level": "DISABLED",
  "audit_type": "WATCHES",
  "description": "Audits watch operations.",
  "name": "WATCHES",
  "min_syslog_level": "INFO"
}
}
]
}

```

Property Name	Type	Description	Notes
<i>audit_settings</i>	<object>	Audit system settings	
<i>audit_settings.audit_categories</i>	<array of <object>>	List of audit categories	
<i>audit_settings.audit_categories</i> [audit_category]	<object>	Information for each audit category	
<i>audit_settings.audit_categories</i> [audit_category]. min_remote_server_level	<string>	Audit levels for each audit category	Values: INFO, ERROR, DISABLED
<i>audit_settings.audit_categories</i> [audit_category].audit_type	<string>	Audit categories	Values: AUTHENTICATION, CAPTURE_JOBS, CRYPTOGRAPHY, COMMUNICATIONS, FILE_OPERATIONS, LICENSING, SETTINGS, SYSTEM_OPERATIONS, USER_MANAGEMENT, VIEWS, WATCHES

<code>audit_settings.audit_categories</code> <code>[audit_category].min_syslog_level</code>	<code><string></code>	Audit levels for each audit category	Values: INFO, ERROR, DISABLED
<code>audit_settings.audit_categories</code> <code>[audit_category].name</code>	<code><string></code>	Audit category name	
<code>audit_settings.audit_categories</code> <code>[audit_category].description</code>	<code><string></code>	Description of events captured by this audit category	

auth_settings

Authentication settings

JSON

```
{
  "local_settings": {
    "min_password_length": number,
    "password_change_history": number,
    "min_password_special_character": number,
    "min_password_upper_letter": number,
    "max_unsuccessful_login_attempts": number,
    "min_password_lower_letter": number,
    "max_password_lifetime_days": number,
    "min_password_numeric_character": number
  },
  "radius_settings": {
    "client_port": string,
    "servers": [
      {
        "shared_secret": string,
        "port": number,
        "address": string
      }
    ],
    "encryption_protocol": string,
    "accounting_enabled": boolean
  },
  "tacacs_settings": {
    "accounting_terminator": string,
    "accounting_enabled": boolean,
    "accounting_value": string,
    "authorization_value": string,
    "servers": [
      {
        "shared_secret": string,
        "port": number,
        "address": string
      }
    ],
    "client_port": string,
    "authorization_response_attribute": string,
    "authorization_attribute": string,
    "accounting_attribute": string
  },
  "auth_sequence": [
    string
  ],
  "remote_auth_settings": {
    "fallback_on_unavailable_only": boolean,
    "default_group": string
  },
  "webui_settings": {
    "login_banner": string,
    "need_purpose": boolean,
    "session_duration": number
  }
}
```

Example:

```
{
  "local_settings": {
    "min_password_length": 8,
    "password_change_history": 10,
    "min_password_special_character": 1,
    "min_password_upper_letter": 1,
    "max_unsuccessful_login_attempts": 3,
    "min_password_lower_letter": 1,
    "max_password_lifetime_days": 90,
    "min_password_numeric_character": 1
  },
  "radius_settings": {
    "client_port": "na",
    "accounting_enabled": false,
    "encryption_protocol": "PAP"
  }
}
```

```

"servers": []
},
"tacacs_settings": {
  "accounting_terminator": "2>&1",
  "accounting_enabled": true,
  "accounting_value": "cace",
  "authorization_value": "cace",
  "servers": [
    {
      "address": "10.1.1.1",
      "port": 49,
      "shared_secret": "key"
    }
  ],
  "client_port": "ttyp6",
  "accounting_attribute": "task_id",
  "authorization_attribute": "service",
  "authorization_response_attribute": "*"
},
"auth_sequence": [
  "LOCAL",
  "TACACS"
],
"remote_auth_settings": {
  "fallback_on_unavailable_only": true,
  "default_group": "Administrators"
},
"webui_settings": {
  "login_banner": "Welcome to Shark.",
  "need_purpose": false,
  "session_duration": 60
}
}

```

Property Name	Type	Description	Notes
<i>auth_settings</i>	<object>	Authentication settings	
<i>auth_settings.local_settings</i>	<object>	Local authentication type parameters	
<i>auth_settings.local_settings.min_password_length</i>	<number>	Minimum password length	
<i>auth_settings.local_settings.password_change_history</i>	<number>	Number of previous user passwords stored in history	
<i>auth_settings.local_settings.min_password_special_character</i>	<number>	Minimum number of special characters	
<i>auth_settings.local_settings.min_password_upper_letter</i>	<number>	Minimum number of upper-case letters	
<i>auth_settings.local_settings.max_unsuccessful_login_attempts</i>	<number>	Number of unsuccessful attempts before user is locked out	
<i>auth_settings.local_settings.min_password_lower_letter</i>	<number>	Minimum number of lower-case letters	
<i>auth_settings.local_settings.max_password_lifetime_days</i>	<number>	Number of days after which password expires	
<i>auth_settings.local_settings.min_password_numeric_character</i>	<number>	Minimum number of numeric characters	
<i>auth_settings.radius_settings</i>	<object>	RADIUS authentication configuration	
<i>auth_settings.radius_settings.client_port</i>	<string>	Client port	
<i>auth_settings.radius_settings.servers</i>	<array of <object>>	List of server mappings	
<i>auth_settings.radius_settings.servers[server]</i>	<object>		
<i>auth_settings.radius_settings.servers[server].shared_secret</i>	<string>	Shared secret key	
<i>auth_settings.radius_settings.servers[server].port</i>	<number>	Port number	
<i>auth_settings.radius_settings.servers[server].address</i>	<string>	IP Address	
<i>auth_settings.radius_settings.encryption_protocol</i>	<string>	Encryption protocol	Values: PAP, CHAP, MSCHAP1, MSCHAP2
<i>auth_settings.radius_settings.accounting_enabled</i>	<boolean>	'true' to enable RADIUS accounting, 'false' otherwise	
<i>auth_settings.tacacs_settings</i>	<object>	TACACS+ authentication configuration	
<i>auth_settings.tacacs_settings.accounting_terminator</i>	<string>	Accounting terminator	

<code>auth_settings.tacacs_settings.accounting_enabled</code>	<code><boolean></code>	'true' to enable TACACS+ accounting, 'false' otherwise	
<code>auth_settings.tacacs_settings.accounting_value</code>	<code><string></code>	Accounting value	
<code>auth_settings.tacacs_settings.authorization_value</code>	<code><string></code>	Authorization value	
<code>auth_settings.tacacs_settings.servers</code>	<code><array of <object>></code>	List of server mappings	
<code>auth_settings.tacacs_settings.servers[server]</code>	<code><object></code>		
<code>auth_settings.tacacs_settings.servers[server].shared_secret</code>	<code><string></code>	Shared secret key	
<code>auth_settings.tacacs_settings.servers[server].port</code>	<code><number></code>	Port number	
<code>auth_settings.tacacs_settings.servers[server].address</code>	<code><string></code>	IP Address	
<code>auth_settings.tacacs_settings.client_port</code>	<code><string></code>	Client port	
<code>auth_settings.tacacs_settings.authorization_response_attribute</code>	<code><string></code>	Authorization response attribute. If set to '*', only the first attribute-value pair returned by the server will be considered during authorization.	
<code>auth_settings.tacacs_settings.authorization_attribute</code>	<code><string></code>	Authorization attribute	
<code>auth_settings.tacacs_settings.accounting_attribute</code>	<code><string></code>	Accounting attribute	
<code>auth_settings.auth_sequence</code>	<code><array of <string>></code>	List of authentication mechanisms used by Shark	
<code>auth_settings.auth_sequence[auth_type]</code>	<code><string></code>	Authentication Mode	Values: LOCAL, TACACS, RADIUS
<code>auth_settings.remote_auth_settings</code>	<code><object></code>	Additional authentication parameter settings for TACACS+ and RADIUS servers	Optional
<code>auth_settings.remote_auth_settings.fallback_on_unavailable_only</code>	<code><boolean></code>	'true' fallbacks to the next authentication mechanism if TACACS+ or RADIUS servers are unavailable, 'false' otherwise	
<code>auth_settings.remote_auth_settings.default_group</code>	<code><string></code>	Default group used for remote authentication	
<code>auth_settings.webui_settings</code>	<code><object></code>	WebUI configuration settings for this Shark	
<code>auth_settings.webui_settings.login_banner</code>	<code><string></code>	Login banner	
<code>auth_settings.webui_settings.need_purpose</code>	<code><boolean></code>	Enabled if the user should be prompted to specify a purpose during login	
<code>auth_settings.webui_settings.session_duration</code>	<code><number></code>	Session inactivity timeout	In minutes

basic_settings

Basic Shark configuration options

JSON


```

{
  "ntp_config": {
    "profiler_mode": boolean,
    "servers": [
      string
    ]
  },
  "domain": string,
  "primary_dns": string,
  "hostname": string,
  "fips_enabled": boolean,
  "mgmt_ports": [
    {
      "enabled": boolean,
      "netmask": string,
      "interface": string,
      "dhcp": boolean,
      "ip_address": string,
      "gateway": string
    }
  ],
  "timezone": string,
  "secondary_dns": string,
  "ssh_enabled": boolean
}

```

Example:

```

{
  "ntp_config": {
    "profiler_mode": false,
    "servers": [
      "10.0.0.1",
      "10.0.0.2"
    ]
  },
  "domain": "riverbed.com",
  "primary_dns": "10.1.0.1",
  "hostname": "shark",
  "fips_enabled": false,
  "mgmt_ports": [
    {
      "enabled": true,
      "netmask": "",
      "interface": "eth0",
      "dhcp": true,
      "ip_address": "",
      "gateway": ""
    },
    {
      "enabled": false,
      "netmask": "255.255.255.0",
      "interface": "eth1",
      "dhcp": false,
      "ip_address": "172.16.22.33",
      "gateway": "172.16.22.11"
    }
  ],
  "timezone": "America/Los_Angeles",
  "secondary_dns": "172.16.1.1",
  "ssh_enabled": true
}

```

Property Name	Type	Description	Notes
<i>basic_settings</i>	<object>	Basic Shark configuration options	
<i>basic_settings.ntp_config</i>	<object>	Shark NTP Configuration	
<i>basic_settings.ntp_config.profiler_mode</i>	<boolean>	'true' if Profiler acts as NTP server, 'false' otherwise	
<i>basic_settings.ntp_config.servers</i>	<array of <string>>	List of NTP Servers	
<i>basic_settings.ntp_config.servers</i> [server]	<string>		
<i>basic_settings.domain</i>	<string>	Network domain	
<i>basic_settings.primary_dns</i>	<string>	Primary DNS server	
<i>basic_settings.hostname</i>	<string>	Shark host name	
<i>basic_settings.fips_enabled</i>	<boolean>	'true' if FIPS mode is enabled, 'false' otherwise	
<i>basic_settings.mgmt_ports</i>	<array of <object>>	List of management ports	
<i>basic_settings.mgmt_ports[port]</i>	<object>	Shark management port configuration	
<i>basic_settings.mgmt_ports[port].enabled</i>	<boolean>	'true' if enabled, 'false' if disabled	Optional

<code>basic_settings.mgmt_ports[port].netmask</code>	<code><string></code>	Network mask for this interface (empty if DHCP is enabled)	
<code>basic_settings.mgmt_ports[port].interface</code>	<code><string></code>	Interface name	
<code>basic_settings.mgmt_ports[port].dhcp</code>	<code><boolean></code>	'true' if DHCP is enabled on this interface, 'false' otherwise	
<code>basic_settings.mgmt_ports[port].ip_address</code>	<code><string></code>	IPv4 address for this interface (empty if DHCP is enabled)	
<code>basic_settings.mgmt_ports[port].gateway</code>	<code><string></code>	Network gateway for this interface (empty if DHCP is enabled)	
<code>basic_settings.timezone</code>	<code><string></code>	Time zone (from IANA Time Zone Database) of this Shark	
<code>basic_settings.secondary_dns</code>	<code><string></code>	Secondary DNS server	Optional
<code>basic_settings.ssh_enabled</code>	<code><boolean></code>	'true' if SSH access to this shark is enabled, 'false' otherwise	

clip_config

Configuration of a clip

JSON

```
{
  "job_id": string,
  "filters": [
    {
      "type": string,
      "description": string,
      "value": string
    }
  ],
  "description": string
}
```

Example:

```
{
  "job_id": "000000A3",
  "filters": [
    {
      "type": "TIME",
      "description": "This is a time filter.",
      "value": "1345830425000000000, 1345830435000000000"
    },
    {
      "type": "BPF",
      "value": "port 80"
    }
  ],
  "description": "This is a clip on job 000000A3"
}
```

Property Name	Type	Description	Notes
<code>clip_config</code>	<code><object></code>	Configuration of a clip	
<code>clip_config.job_id</code>	<code><string></code>	Job ID on which the clip is applied	Optional
<code>clip_config.filters</code>	<code><array of <object>></code>	List of clip filters	Optional
<code>clip_config.filters[filters]</code>	<code><object></code>	Configuration for a clip filter	
<code>clip_config.filters[filters].type</code>	<code><string></code>	Clip configuration filter type	Values: TIME, SHARK, BPF, WIRESHARK_DISPLAY
<code>clip_config.filters[filters].description</code>	<code><string></code>	Description of this filter	Optional
<code>clip_config.filters[filters].value</code>	<code><string></code>	Value of this filter	
<code>clip_config.description</code>	<code><string></code>	Description of this clip configuration	Optional

clip_status

Status information for a clip

JSON

```
{
  "estimated_size": number,
  "modification_time": timestamp,
  "creation_time": timestamp,
  "locked": boolean
}
```

Example:

```
{
  "estimated_size": 268435456,
  "modification_time": 1345830535,
  "creation_time": 1345830425,
  "locked": true
}
```

Property Name	Type	Description	Notes
<i>clip_status</i>	<object>	Status information for a clip	
<i>clip_status.estimated_size</i>	<number>	Estimated size for this clip in packet storage	Optional
<i>clip_status.modification_time</i>	<timestamp>	Clip last modified time	Optional; Seconds since January 1, 1970
<i>clip_status.creation_time</i>	<timestamp>	Clip creation time	Optional; Seconds since January 1, 1970
<i>clip_status.locked</i>	<boolean>	'true' if packets and the index for this clip are locked, 'false' otherwise	

custom_application

JSON

```
{
  "name": string,
  "uri": string
}
```

Example:

```
{
  "name": "My_Bugzilla",
  "uri": "http://bugzilla.mydomain.com/"
}
```

Property Name	Type	Description	Notes
<i>custom_application</i>	<object>		
<i>custom_application.name</i>	<string>	Custom L7 signature name	
<i>custom_application.uri</i>	<string>	Custom L7 signature URI rule	

dimension_restrictions

Specification of dimension restrictions for a watch. Dimension restrictions can be used to narrow down what the watch checks, so that, for example, only some bars in a barchart are observed. If multiple restrictions are present in the list, the server ANDs them.

JSON

```

{
  "sub_restrictions": [ dimension_restrictions ],
  "restrictions": [
    {
      "field": string,
      "value": string
    }
  ],
  "bool_operator": string
}

```

Example:

```

{
  "sub_restrictions": [],
  "restrictions": [
    {
      "field": "c1",
      "value": "Web"
    },
    {
      "field": "c1",
      "value": "DNS"
    }
  ],
  "bool_operator": "OR"
}

```

Property Name	Type	Description	Notes
<i>dimension_restrictions</i>	<object>	Specification of dimension restrictions for a watch. Dimension restrictions can be used to narrow down what the watch checks, so that, for example, only some bars in a barchart are observed. If multiple restrictions are present in the list, the server ANDs them.	
<i>dimension_restrictions.sub_restrictions</i>	<array of <dimension_restrictions>>	Sub-restriction list	
<i>dimension_restrictions.sub_restrictions</i> [sub_restriction]	<dimension_restrictions>	Instance of a <dimension_restrictions>	
<i>dimension_restrictions.restrictions</i>	<array of <object>>	Restriction list	
<i>dimension_restrictions.restrictions</i> [restriction]	<object>		
<i>dimension_restrictions.restrictions</i> [restriction].field	<string>	The dimension field identified by the database column name (e.g. c2 or c5)	Column numbering starts with 1 and the field must be a dimension
<i>dimension_restrictions.restrictions</i> [restriction].value	<string>	The matching value	
<i>dimension_restrictions.bool_operator</i>	<string>	The boolean operation to apply: "And" or "Or"	Values: NOT_INITIALIZED, AND, OR

dir

Directory details

JSON

```

{
  "files": [ file ],
  "dirs": [ dir ],
  "description": string,
  "created": timestamp,
  "modified": timestamp,
  "id": string
}

```

Example:

```

{
  "files": [
    {
      "created": 1347053478,
      "modified": 1347053478,
      "type": "PCAPNG_FILE",
      "id": "/admin/http-ng.pcapng",
      "link_type": "DLT_EN10MB",
      "size": 149952
    },
    {
      "created": 1343026049,
      "modified": 1343026050,
      "type": "PCAP_FILE",
      "id": "/admin/prova.cap"
    }
  ]
}

```

```

    "link_type": "DLT_EN10MB",
    "size": 145919
  }
],
"dirs": [
  {
    "files": [
      {
        "created": 1342768036,
        "modified": 1342768037,
        "type": "PCAP_FILE",
        "id": "/admin/multisegment/2-router1-in.pcap",
        "link_type": "DLT_EN10MB",
        "size": 16246
      },
      {
        "created": 1342768038,
        "modified": 1342768038,
        "type": "PCAP_FILE",
        "id": "/admin/multisegment/4-router2-in.pcap",
        "link_type": "DLT_EN10MB",
        "size": 15988
      },
      {
        "created": 1342768038,
        "modified": 1342768038,
        "type": "PCAP_FILE",
        "id": "/admin/multisegment/6-router3-in.pcap",
        "link_type": "DLT_EN10MB",
        "size": 15988
      },
      {
        "created": 1342768079,
        "linked_sources": [
          {
            "path": "2-router1-in.pcap"
          },
          {
            "path": "4-router2-in.pcap"
          },
          {
            "path": "6-router3-in.pcap"
          }
        ],
        "modified": 1348764826,
        "type": "MERGED_FILE",
        "id": "/admin/multisegment/merged.pvt",
        "link_type": "DLT_EN10MB",
        "size": 243
      },
      {
        "created": 1342768084,
        "linked_sources": [
          {
            "path": "2-router1-in.pcap",
            "default_source": true
          },
          {
            "path": "4-router2-in.pcap"
          },
          {
            "path": "fs/admin/multisegment/6-router3-in.pcap"
          }
        ],
        "modified": 1348764826,
        "type": "MULTISEGMENT_FILE",
        "id": "/admin/multisegment/multisegment.pvt",
        "link_type": "DLT_EN10MB",
        "size": 264
      }
    ],
    "dirs": [],
    "description": "This is a multi-segment file",
    "created": 1342767955,
    "modified": 1343077906,
    "id": "/admin/multisegment"
  },
  {
    "files": [
      {
        "created": 1342645581,
        "modified": 1342646988,
        "type": "PCAP_FILE",
        "id": "/admin/new-dir/http.cap",
        "link_type": "DLT_EN10MB",
        "size": 147456
      }
    ]
  }
]

```

```

    ],
    "dirs": [],
    "description": "This is a custom folder",
    "created": 1348764627,
    "modified": 1348764743,
    "id": "/admin/new-dir"
  }
],
"description": "My Files",
"created": 1341252038,
"modified": 1348764743,
"id": "/admin"
}

```

Property Name	Type	Description	Notes
<i>dir</i>	<object>	Directory details	
<i>dir.files</i>	<array of <file>>	List of files	
<i>dir.files[file]</i>	<file>	Instance of a <file>	
<i>dir.dirs</i>	<array of <dir>>	List of directories	
<i>dir.dirs[dir]</i>	<dir>	Instance of a <dir>	
<i>dir.description</i>	<string>	Directory description. It is used when the directory has an alias name.	Optional
<i>dir.created</i>	<timestamp>	Creation time in Unix time format	Optional; Seconds since January 1, 1970
<i>dir.modified</i>	<timestamp>	Modification time in Unix time format	Optional; Seconds since January 1, 1970
<i>dir.id</i>	<string>	Directory id	

export

Information about an export

JSON

```

{
  "status": export_status,
  "config": export_config,
  "id": string
}

```

Example:

```

{
  "status": {
    "owner": "admin",
    "bytes_approx": 855784,
    "state": "RUNNING",
    "creation_time": 1364334117658433000
  },
  "config": {
    "output_format": "PCAP_US",
    "start_time": 1364230933,
    "end_time": 1364317200
  },
  "id": "000193E1"
}

```

Property Name	Type	Description	Notes
<i>export</i>	<object>	Information about an export	
<i>export.status</i>	<export_status>	Status of this export	
<i>export.config</i>	<export_config>	Configuration of this export	
<i>export.id</i>	<string>	ID of export	

export_config

JSON

```

{
  "stop_rule": {
    "packet_limit": number,
    "size_limit": number,
    "time_limit": number
  },
  "output_format": string,
  "output_filename": string,
  "end_time": timestamp,
  "filters": [ filter ],
  "snap_length": number,
  "start_time": timestamp
}

```

Example:

```

{
  "output_format": "PCAP_US",
  "start_time": 1364230800,
  "end_time": 1364317200
}

```

Property Name	Type	Description	Notes
<code>export_config</code>	<code><object></code>		
<code>export_config.stop_rule</code>	<code><object></code>	Stop rule for a job	Optional
<code>export_config.stop_rule.packet_limit</code>	<code><number></code>	Max number of packets	Optional
<code>export_config.stop_rule.size_limit</code>	<code><number></code>	Max bytes of packet data	Optional
<code>export_config.stop_rule.time_limit</code>	<code><number></code>	Max time in seconds	Optional
<code>export_config.output_format</code>	<code><string></code>	Output format (PCAP or PCAP-NG) and resolution of packet stream	Values: PCAP_US, PCAP_NS, PCAPNG_US, PCAPNG_NS
<code>export_config.output_filename</code>	<code><string></code>	If sending packets to file, the filename within the Shark file system	Optional
<code>export_config.end_time</code>	<code><timestamp></code>	Time (seconds from epoch) at which export is to end	Optional; Seconds since January 1, 1970
<code>export_config.filters</code>	<code><array of <filter>></code>	Collection of filters to apply to packets prior to export	Optional
<code>export_config.filters[filter]</code>	<code><filter></code>	Instance of a <code><filter></code>	
<code>export_config.snap_length</code>	<code><number></code>	Packet snap length for this export	Optional; Default is 65535
<code>export_config.start_time</code>	<code><timestamp></code>	Time (seconds from epoch) at which export is to begin	Optional; Seconds since January 1, 1970

export_status

JSON

```

{
  "owner": string,
  "creation_time": timestamp-hp,
  "state": string,
  "bytes_approx": number
}

```

Example:

```

{
  "owner": "admin",
  "bytes_approx": 855784,
  "state": "RUNNING",
  "creation_time": 1364334117658433000
}

```

Property Name	Type	Description	Notes
<code>export_status</code>	<code><object></code>		
<code>export_status.owner</code>	<code><string></code>	User who initiated the export	
<code>export_status.creation_time</code>	<code><timestamp-hp></code>	Time at which the export was created	
<code>export_status.state</code>	<code><string></code>	State of the export	Values: UNINITIALIZED, LOADED, PARAMS_LOADED, INITIALIZED, READY, RUNNING, ERRORS, DONE, CLOSING, PAUSED
<code>export_status.bytes_approx</code>	<code><number></code>	For exports from a job, approximate number of bytes in the export	Optional

file

File's details

JSON

```
{
  "index": index_info,
  "created": timestamp,
  "linked_sources": [
    {
      "path": string,
      "timeskew": number,
      "description": string,
      "default_source": boolean
    }
  ],
  "format": string,
  "modified": timestamp,
  "type": string,
  "id": string,
  "link_type": string,
  "size": number
}
```

Example:

```
{
  "created": 1342768079,
  "linked_sources": [
    {
      "path": "2-router1-in.pcap"
    },
    {
      "path": "4-router2-in.pcap"
    },
    {
      "path": "6-router3-in.pcap"
    }
  ],
  "modified": 1348764826,
  "type": "MERGED_FILE",
  "id": "/admin/multisegment/merged.pvt",
  "link_type": "DLT_EN10MB",
  "size": 243
}
```

Property Name	Type	Description	Notes
<i>file</i>	<i><object></i>	File's details	
<i>file.index</i>	<i><index_info></i>	Index info	
<i>file.created</i>	<i><timestamp></i>	Creation time in Unix time format	Optional; Seconds since January 1, 1970
<i>file.linked_sources</i>	<i><array of <object>></i>	Linked sources details list	Optional
<i>file.linked_sources[linked_source]</i>	<i><object></i>		
<i>file.linked_sources[linked_source].path</i>	<i><string></i>	Linked source path. It could be either an absolute path (fs/ID) or a relative path starting from the aggregated file folder.	
<i>file.linked_sources[linked_source].timeskew</i>	<i><number></i>	It is the packets timestamps offset associated with the linked source	Optional
<i>file.linked_sources[linked_source].description</i>	<i><string></i>	A simple description field associated with the linked source	Optional
<i>file.linked_sources[linked_source].default_source</i>	<i><boolean></i>	The default source is the reference source in a multisegment file collection and it is used as reference for the time skew calculation	Optional
<i>file.format</i>	<i><string></i>	File time format	Optional; Values: PCAP_US, PCAP_NS, PCAPNG_US, PCAPNG_NS, UNKNOWN
<i>file.modified</i>	<i><timestamp></i>	Modification time in Unix time format	Optional; Seconds since January 1, 1970
<i>file.type</i>	<i><string></i>	File type	Values: MULTISEGMENT_FILE, MERGED_FILE, PCAP_FILE, PCAPNG_FILE, ERF_FILE, UNKNOWN_FILE
<i>file.id</i>	<i><string></i>	File id	
<i>file.link_type</i>	<i><string></i>	Link layer type	Optional
<i>file.size</i>	<i><number></i>	File size in bytes	Optional

filter

JSON


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

Example:

```
{
  "type": "BPF",
  "description": "BPF filter on port 80",
  "value": "port 80"
}
```

Property Name	Type	Description	Notes
<i>filter</i>	<object>		
<i>filter.type</i>	<string>	Filter type	Values: TIME, SHARK, BPF, WIRESHARK_DISPLAY, DECRYPT, STATE
<i>filter.description</i>	<string>	Description, if needed	Optional
<i>filter.value</i>	<string>	Filter value	

group

Definition of a user group

JSON

```
{
  "name": string,
  "capabilities": [
    string
  ],
  "description": string
}
```

Example:

```
{
  "name": "Administrators",
  "capabilities": [
    "CAPABILITY_ADMINISTRATOR"
  ],
  "description": "Administrators"
}
```

Property Name	Type	Description	Notes
<i>group</i>	<object>	Definition of a user group	
<i>group.name</i>	<string>	Group name	
<i>group.capabilities</i>	<array of <string>>	Specifies the list of capabilities for the group	
<i>group.capabilities[capability]</i>	<string>	Specifies the capabilities of the group	Values: CAPABILITY_ADMINISTRATOR, CAPABILITY_APPLY_VIEWS_ON_FILES, CAPABILITY_APPLY_VIEWS_ON_INTERFACES, CAPABILITY_SHARE_VIEWS, CAPABILITY_CREATE_FILES, CAPABILITY_IMPORT_FILES, CAPABILITY_EXPORT_FILES, CAPABILITY_CREATE_JOBS, CAPABILITY_SCHEDULE_WATCHES, CAPABILITY_ACCESS_PROBE_FILES
<i>group.description</i>	<string>	Group description	

index_info

Information for one index

JSON

```

{
  "status": string,
  "start_time": timestamp-hp,
  "end_time": timestamp-hp
}

```

Example:

```

{
  "status": "OK",
  "start_time": 1345830425000000000,
  "end_time": 1345830435000000000
}

```

Property Name	Type	Description	Notes
<i>index_info</i>	<object>	Information for one index	
<i>index_info.status</i>	<string>	Running state of an index	Values: OK, RUNNING, ERROR
<i>index_info.start_time</i>	<timestamp-hp>	First packet timestamp for this index	
<i>index_info.end_time</i>	<timestamp-hp>	Last packet timestamp for this index	

interface

Information on a Shark interface

JSON

```

{
  "interface_components": [
    string
  ],
  "description": string,
  "virtual_info": {
    "file_name": string,
    "job_handle": string,
    "device_name": string
  },
  "link": {
    "status": string,
    "tap_type": string,
    "stats": {
      "bytes_rx": number,
      "packets_rx": number
    }
  },
  "addresses": [
    {
      "broadcast": string,
      "netmask": string,
      "destination": string,
      "family": string,
      "address": string
    }
  ],
  "dedup_status": string,
  "speed_options": [
    {
      "status": string,
      "speed_mbps": string,
      "duplex_type": string
    }
  ],
  "mac_address": string,
  "is_profiler_export_enabled": boolean,
  "blink_status": string,
  "type": string
},
"board": {
  "pass_thru": string,
  "type": string,
  "name": string
},
"is_promiscuous_mode": boolean,
"type": string,
"id": string,
"name": string
}

```

Example:

```

{
  "interface_components": [],
  "description": "TurboCap 1Gb device no.0",

```

```

"link": {
  "status": "UP",
  "tap_type": "NONE",
  "stats": {
    "bytes_rx": 73479647,
    "packets_rx": 1007765
  },
  "dedup_status": "DISABLED",
  "speed_options": [
    {
      "status": "ENABLED",
      "speed_mbps": "MBPS_10",
      "duplex_type": "FULL"
    },
    {
      "status": "ENABLED",
      "speed_mbps": "MBPS_10",
      "duplex_type": "HALF"
    },
    {
      "status": "ENABLED",
      "speed_mbps": "MBPS_100",
      "duplex_type": "FULL"
    },
    {
      "status": "ENABLED",
      "speed_mbps": "MBPS_100",
      "duplex_type": "HALF"
    },
    {
      "status": "NEGOTIATED",
      "speed_mbps": "MBPS_1000",
      "duplex_type": "FULL"
    }
  ],
  "mac_address": "00:e0:ed:1e:9d:1a",
  "blink_status": "OFF",
  "type": "EN10MB"
},
"board": {
  "pass_thru": "DISABLED",
  "type": "1G_COPPER",
  "name": "TurboCap 1 Gigabit Ethernet Board (00:e0:ed:1e:9d:1a)"
},
"is_promiscuous_mode": true,
"type": "TURBOCAP_ADAPTER",
"id": "tc0",
"name": "tc0"
}

```

Property Name	Type	Description	Notes
<i>interface</i>	<object>	Information on a Shark interface	
<i>interface.interface_components</i>	<array of <string>>	For aggregating ports, list of physical ports making up the aggregation	
<i>interface.interface_components</i> [component_interface]	<string>		
<i>interface.description</i>	<string>	String describing this interface	
<i>interface.virtual_info</i>	<object>	Information on a virtual interface (used internally by Shark)	Optional
<i>interface.virtual_info.file_name</i>	<string>	File name corresponding to virtual interface	
<i>interface.virtual_info.job_handle</i>	<string>	If virtual interface is a capture job, handle of the job	Optional
<i>interface.virtual_info.device_name</i>	<string>	Device name corresponding to virtual interface	
<i>interface.link</i>	<object>	Information on a physical interface link	Optional
<i>interface.link.status</i>	<string>	Indicates whether this link is up or down	Optional; Values: UP, DOWN, UNKNOWN
<i>interface.link.tap_type</i>	<string>	Tap type used on this link	Values: NONE, CPACKET, GIGAMON_HEADER, GIGAMON_TRAILER, GIGAMON_TRAILER_X12, VSS, VSS_PORT_ID, ANUE, ARISTA, UNKNOWN
<i>interface.link.stats</i>	<object>	Low-level statistics on traffic over this interface	Optional
<i>interface.link.stats.bytes_rx</i>	<number>	Bytes received	
<i>interface.link.stats.packets_rx</i>	<number>	Packets received	
<i>interface.link.addresses</i>	<array of <object>>	List of link addresses	Optional
<i>interface.link.addresses[link_address]</i>	<object>	Address information for a physical interface	
<i>interface.link.addresses[link_address].broadcast</i>	<string>	Broadcast address for this interface	

<i>interface.link.addresses[link_address].netmask</i>	<i><string></i>	Netmask for this interface	
<i>interface.link.addresses[link_address].destination</i>	<i><string></i>	Destination address for this interface	Optional
<i>interface.link.addresses[link_address].family</i>	<i><string></i>	Protocol family served by this interface	
<i>interface.link.addresses[link_address].address</i>	<i><string></i>	IP address for this interface	
<i>interface.link.dedup_status</i>	<i><string></i>	Indicates whether or not packet deduplication has been enabled for this link	Optional; Values: ENABLED, DISABLED, NOT_SUPPORTED
<i>interface.link.speed_options</i>	<i><array of <object>></i>	List of link speed options	Optional
<i>interface.link.speed_options [link_speed_option]</i>	<i><object></i>	Speed, duplex type, and status of a speed option	
<i>interface.link.speed_options [link_speed_option].status</i>	<i><string></i>	Status of this link speed option for this interface	Optional; Values: SUPPORTED, ENABLED, NEGOTIATED
<i>interface.link.speed_options [link_speed_option].speed_mbps</i>	<i><string></i>	Throughput for this speed option	Values: MBPS_10, MBPS_100, MBPS_1000, MBPS_10000
<i>interface.link.speed_options [link_speed_option].duplex_type</i>	<i><string></i>	Duplex type for this speed option	Values: HALF, FULL, UNKNOWN
<i>interface.link.mac_address</i>	<i><string></i>	MAC address of this link	
<i>interface.link.is_profiler_export_enabled</i>	<i><boolean></i>	'true' if profiler export has been enabled for this link, 'false' otherwise	Optional
<i>interface.link.blink_status</i>	<i><string></i>	Indicates 'blink' status for this link	Optional; Values: ON, OFF, UNKNOWN
<i>interface.link.type</i>	<i><string></i>	Link layer type of this link	Values: NONE, EN10MB, RAW, IEEE802_11, IEEE802_11_RADIO, PPI, PPP_WITH_DIR, LINUX_SLL, C_HDLC, UNKNOWN
<i>interface.board</i>	<i><object></i>	Information on a physical packet capture board	Optional
<i>interface.board.pass_thru</i>	<i><string></i>	Enabled status of pass-thru mode (only supported on 1GB Copper TurboCap cards)	Values: ENABLED, DISABLED, NOT_SUPPORTED
<i>interface.board.type</i>	<i><string></i>	Type of this board	Values: 1G_COPPER, 1G_FIBER, 10G_FIBER, PCAP, UNKNOWN
<i>interface.board.name</i>	<i><string></i>	Name of this board	
<i>interface.is_promiscuous_mode</i>	<i><boolean></i>	'true' if interface is in promiscuous mode, 'false' otherwise	Optional
<i>interface.type</i>	<i><string></i>	Type of this interface	Values: TURBOCAP_ADAPTER, PCAP_ADAPTER, AIRPCAP_ADAPTER, VIRTUAL, BOARD_AGGREGATING, AGGREGATING, UNKNOWN
<i>interface.id</i>	<i><string></i>	ID of this interface	
<i>interface.name</i>	<i><string></i>	Name of this interface	

job_config

Configuration information for a job

JSON

```

{
  "bpf_filter": string,
  "packet_retention": {
    "packet_limit": number,
    "size_limit": number,
    "time_limit": number
  },
  "name": string,
  "start_immediately": boolean,
  "requested_start_time": timestamp,
  "stop_rule": {
    "packet_limit": number,
    "size_limit": number,
    "time_limit": number
  },
  "indexing": {
    "synced": boolean,
    "size_limit": number,
    "dpi_enabled": boolean,
    "time_limit": number
  },
  "interface_description": string,
  "requested_end_time": timestamp,
  "snap_length": number,
  "interface_name": string
}

```

Example:

```

{
  "snap_length": 65535,
  "interface_name": "mon0",
  "packet_retention": {
    "size_limit": 5368709120
  },
  "name": "New Job 1",
  "interface_description": "mon0"
}

```

Property Name	Type	Description	Notes
<i>job_config</i>	<object>	Configuration information for a job	
<i>job_config.bpf_filter</i>	<string>	BPF filter applied to this capture job	Optional
<i>job_config.packet_retention</i>	<object>	Packet retention info for a job	
<i>job_config.packet_retention.packet_limit</i>	<number>	Max number of packets to be retained	Optional
<i>job_config.packet_retention.size_limit</i>	<number>	Max bytes of packet data to be retained	
<i>job_config.packet_retention.time_limit</i>	<number>	Time period for which packet data will be retained	Optional
<i>job_config.name</i>	<string>	Job name	
<i>job_config.start_immediately</i>	<boolean>	'true' if job is to start immediately upon creation, 'false' otherwise	Optional
<i>job_config.requested_start_time</i>	<timestamp>	Specific time at which job is to start	Optional; Seconds since January 1, 1970
<i>job_config.stop_rule</i>	<object>	Stop rule for a job	Optional
<i>job_config.stop_rule.packet_limit</i>	<number>	Max number of packets	Optional
<i>job_config.stop_rule.size_limit</i>	<number>	Max bytes of packet data	Optional
<i>job_config.stop_rule.time_limit</i>	<number>	Max time in seconds	Optional
<i>job_config.indexing</i>	<object>	Job index configuration	Optional
<i>job_config.indexing.synced</i>	<boolean>	'true' if index is synced with packet storage	Optional
<i>job_config.indexing.size_limit</i>	<number>	Max number of bytes for this index	Optional
<i>job_config.indexing.dpi_enabled</i>	<boolean>	'true' if dpi tagging is enabled	Optional
<i>job_config.indexing.time_limit</i>	<number>	Max time this index can exist	Optional
<i>job_config.interface_description</i>	<string>	Description of interface on which job is collecting packet data	Optional
<i>job_config.requested_end_time</i>	<timestamp>	Specific time at which job is to end	Optional; Seconds since January 1, 1970
<i>job_config.snap_length</i>	<number>	Packet snap length for this capture job	Optional; Default is 65535
<i>job_config.interface_name</i>	<string>	Name of interface on which job is collecting packet data	

job_index_info

JSON

```
{
  "status": string,
  "start_time": timestamp-hp,
  "end_time": timestamp-hp,
  "synced_with_job": boolean,
  "size": number
}
```

Example:

```
{
  "status": "RUNNING",
  "start_time": 1354054943377117000,
  "end_time": 1354657734848519000,
  "synced_with_job": false,
  "size": 3065578
}
```

Property Name	Type	Description	Notes
<i>job_index_info</i>	<object>		
<i>job_index_info.status</i>	<string>	Running state of an index	Values: OK, RUNNING, ERROR
<i>job_index_info.start_time</i>	<timestamp-hp>	Start time of the index	
<i>job_index_info.end_time</i>	<timestamp-hp>	End time of the index	
<i>job_index_info.synced_with_job</i>	<boolean>		Optional
<i>job_index_info.size</i>	<number>	Size of index on the OS file system	Optional

job_status

Status information for a job

JSON

```
{
  "state": string,
  "packet_size": number,
  "packet_start_time": timestamp-hp,
  "packet_end_time": timestamp-hp
}
```

Example:

```
{
  "packet_end_time": 1345512749000000000,
  "state": "STOPPED",
  "packet_start_time": 1344456875000000000,
  "packet_size": 44781772
}
```

Property Name	Type	Description	Notes
<i>job_status</i>	<object>	Status information for a job	
<i>job_status.state</i>	<string>	Running state of a capture job	Values: ACTIVE, RUNNING, STOPPED, UNKNOWN
<i>job_status.packet_size</i>	<number>	Size of this job in packet storage	
<i>job_status.packet_start_time</i>	<timestamp-hp>	First packet timestamp for this job	
<i>job_status.packet_end_time</i>	<timestamp-hp>	Last packet timestamp for this job	

layer4_mapping

JSON

```

{
  "override": boolean,
  "priority": number,
  "hosts": [
    string
  ],
  "name": string,
  "ports": [
    {
      "port_range": string,
      "protocol": string
    }
  ]
}

```

Example:

```

{
  "override": true,
  "priority": 0,
  "hosts": [
    "192.168.140.18"
  ],
  "name": "My_server",
  "ports": [
    {
      "port_range": "99",
      "protocol": "TCP"
    },
    {
      "port_range": "15",
      "protocol": "TCP"
    }
  ]
}

```

Property Name	Type	Description	Notes
<i>layer4_mapping</i>	< <i>object</i> >		
<i>layer4_mapping.override</i>	< <i>boolean</i> >	If true this L4 mapping rule overrides the L7 applications	Optional
<i>layer4_mapping.priority</i>	< <i>number</i> >	Layer4 mapping priority: smaller values have higher priority	Optional
<i>layer4_mapping.hosts</i>	< <i>array of <string>></i>	List of hosts: each host can be defined as 'address[/mask]'	
<i>layer4_mapping.hosts[host]</i>	< <i>string</i> >		
<i>layer4_mapping.name</i>	< <i>string</i> >	Layer4 mapping name	Optional
<i>layer4_mapping.ports</i>	< <i>array of <object>></i>	List of port range definitions for this layer4 mapping	
<i>layer4_mapping.ports[port_range].port_range</i>	< <i>string</i> >	Port range definition: portA[-portB]	
<i>layer4_mapping.ports[port_range].protocol</i>	< <i>string</i> >		Values: TCP, UDP

notification_settings

Configuration for email notifications

JSON

```

{
  "mail": {
    "smtp_server_port": number,
    "smtp_server_address": string,
    "to_address": string,
    "from_address": string
  },
  "trap": {
    "receivers": [
      {
        "username": string,
        "engine_id": string,
        "address": string,
        "community": string,
        "privacy": {
          "protocol": string,
          "passphrase": string
        }
      }
    ]
  }
}

```

```

    },
    "authentication": {
      "protocol": string,
      "passphrase": string
    },
    "version": string,
    "security_level": string
  }
}
},
"notifier": {
  "notifications": [
    {
      "enabled": boolean,
      "id": string,
      "description": string
    }
  ],
  "enabled": boolean,
  "trap_notification_enabled": boolean
}
}

```

Example:

```

{
  "mail": {
    "smtp_server_port": 25,
    "to_address": "admin@foo.com",
    "smtp_server_address": "smtp.foo.com",
    "from_address": "shark@foo.com"
  },
  "trap": {
    "receivers": [
      {
        "version": "V1",
        "community": "public",
        "address": "1.2.3.4"
      },
      {
        "version": "V1",
        "community": "public",
        "address": "1.2.3.5"
      }
    ]
  },
  "notifier": {
    "notifications": [
      {
        "enabled": true,
        "id": "m_clock_monitor.time_shift",
        "description": "Notify every time the system clock is modified"
      },
      {
        "enabled": true,
        "id": "m_link_state_monitor.link_up_down",
        "description": "Notify when link up/down state changes"
      },
      {
        "enabled": true,
        "id": "m_reboot_monitor.reboot",
        "description": "Notify every time this Shark appliance is rebooted"
      },
      {
        "enabled": true,
        "id": "m_sa_events.job_change",
        "description": "Notify whenever there is job status change"
      },
      {
        "enabled": true,
        "id": "m_sa_events.disk_pressure",
        "description": "Notify whenever there is disk pressure event"
      },
      {
        "enabled": true,
        "id": "m_sa_events.memory_pressure",
        "description": "Notify whenever there is memory pressure event"
      },
      {
        "enabled": true,
        "id": "m_sa_events.watch_events",
        "description": "Notify whenever there is watch event"
      },
      {
        "enabled": true,
        "id": "m_sa_events.view_killed_events",
        "description": "Notify whenever there is a view killed"
      },
    ]
  }
}

```



```

    "enabled": true,
    "id": "m_storage_monitor.bad_storage",
    "description": "Notify whenever there is a change in the packet storage status"
  },
  "enabled": true,
  "trap_notification_enabled": true
}

```

Property Name	Type	Description	Notes
<i>notification_settings</i>	<object>	Configuration for email notifications	
<i>notification_settings.mail</i>	<object>	SMTP settings for email notifications	Optional
<i>notification_settings.mail.smtp_server_port</i>	<number>	SMTP server port (defaults to 25)	Optional
<i>notification_settings.mail.smtp_server_address</i>	<string>	SMTP server IP address	
<i>notification_settings.mail.to_address</i>	<string>	SMTP 'to' address	
<i>notification_settings.mail.from_address</i>	<string>	SMTP 'from' address	
<i>notification_settings.trap</i>	<object>	Trap notification settings	Optional
<i>notification_settings.trap.receivers</i>	<array of <object>>	A list of trap receivers	
<i>notification_settings.trap.receivers[trap]</i>	<object>	SNMP trap receiver configuration	
<i>notification_settings.trap.receivers[trap].username</i>	<string>	(Required for V3) SNMP user name	Optional
<i>notification_settings.trap.receivers[trap].engine_id</i>	<string>	(Required for V3) Unique ID associated with the trap receiver	Optional
<i>notification_settings.trap.receivers[trap].address</i>	<string>	Receiver address (hostname or IP address)	
<i>notification_settings.trap.receivers[trap].community</i>	<string>	(Required for V1 and V2C) SNMP community string	Optional
<i>notification_settings.trap.receivers[trap].privacy</i>	<object>	(Required with SNMP privacy) SNMP privacy information	Optional
<i>notification_settings.trap.receivers[trap].privacy.protocol</i>	<string>	Privacy protocol	Values: DES, AES
<i>notification_settings.trap.receivers[trap].privacy.passphrase</i>	<string>	Privacy passphrase (must be at least 8 characters long)	
<i>notification_settings.trap.receivers[trap].authentication</i>	<object>	(Required with SNMP authentication) SNMP authentication information	Optional
<i>notification_settings.trap.receivers[trap].authentication.protocol</i>	<string>	Authentication protocol	Values: MD5, SHA
<i>notification_settings.trap.receivers[trap].authentication.passphrase</i>	<string>	Authentication passphrase (must be at least 8 characters long)	
<i>notification_settings.trap.receivers[trap].version</i>	<string>	SNMP version	Values: V1, V2C, V3
<i>notification_settings.trap.receivers[trap].security_level</i>	<string>	(Required for V3) SNMP security level	Optional; Values: NO_AUTH_NO_PRIVACY, AUTH_NO_PRIVACY, AUTH_PRIVACY
<i>notification_settings.notifier</i>	<object>	Notification settings	
<i>notification_settings.notifier.notifications</i>	<array of <object>>	A list of notification descriptors	
<i>notification_settings.notifier.notifications[notification]</i>	<object>	A single notification descriptor	
<i>notification_settings.notifier.notifications[notification].enabled</i>	<boolean>	'true' if notification is enabled, 'false' otherwise	
<i>notification_settings.notifier.notifications[notification].id</i>	<string>	Unique ID for the notification (assigned by the system)	
<i>notification_settings.notifier.notifications[notification].description</i>	<string>	(Optional) Description for the notification	Optional
<i>notification_settings.notifier.enabled</i>	<boolean>	'true' if SMTP notifications are enabled, 'false' otherwise	
<i>notification_settings.notifier.trap_notification_enabled</i>	<boolean>	'true' if trap notifications are enabled, 'false' otherwise	Optional

port_group

JSON

```

{
  "priority": number,
  "name": string,
  "ports": [
    {
      "port_range": string,
      "protocol": string
    }
  ]
}

```

Example:

```

{
  "priority": 0,
  "name": "Web",
  "ports": [
    {
      "port_range": "80",
      "protocol": "TCP"
    },
    {
      "port_range": "8080",
      "protocol": "TCP"
    },
    {
      "port_range": "443",
      "protocol": "TCP"
    }
  ]
}

```

Property Name	Type	Description	Notes
<code>port_group</code>	<object>		
<code>port_group.priority</code>	<number>	Port group priority: smaller values have higher priority	Optional
<code>port_group.name</code>	<string>	Port group name	Optional
<code>port_group.ports</code>	<array of <object>>	List of port range definitions for this group	
<code>port_group.ports[port_range]</code>	<object>		
<code>port_group.ports[port_range].port_range</code>	<string>	Port range definition: portA[-portB]	
<code>port_group.ports[port_range].protocol</code>	<string>		Values: TCP, UDP

port_name

JSON

```

{
  "udp": string,
  "port": number,
  "tcp": string
}

```

Example:

```

{
  "udp": "http",
  "port": 80,
  "tcp": "http"
}

```

Property Name	Type	Description	Notes
<code>port_name</code>	<object>		
<code>port_name.udp</code>	<string>	UDP port name for this port number	Optional
<code>port_name.port</code>	<number>	Transport port number	Optional
<code>port_name.tcp</code>	<string>	TCP port name for this port number	Optional

profilerexport_settings

Configuration of the Profiler Export

JSON

```

{
  "profilers": [
    {
      "status": {
        "state": string,
        "cause": string
      },
      "sync": {
        "sync_port_groups": boolean,
        "sync_layer4_mappings": boolean,
        "sync_custom_applications": boolean,
        "sync_port_names": boolean
      },
      "address": string
    }
  ],
  "enabled": boolean,
  "adapter_ports": [
    {
      "bpf_filter": string,
      "voip_enabled": boolean,
      "name": string,
      "dpi_enabled": boolean,
      "enabled": boolean,
      "description": string
    }
  ],
  "valid_license": boolean
}

```

Example:

```

{
  "valid_license": true,
  "enabled": true,
  "adapter_ports": [
    {
      "enabled": true,
      "voip_enabled": true,
      "name": "tc0",
      "description": "TurboCap 1Gb device no.0"
    },
    {
      "enabled": true,
      "bpf_filter": "tcp",
      "voip_enabled": false,
      "name": "tc1",
      "description": "TurboCap 1Gb device no.1"
    }
  ],
  "profilers": [
    {
      "status": {
        "state": "ERROR",
        "cause": "Host not found: myprofiler.mydomain.com"
      },
      "address": "myprofiler.mydomain.com"
    },
    {
      "status": {
        "state": "OK"
      },
      "address": "myprofiler1.mydomain.com"
    }
  ]
}

```

Property Name	Type	Description	Notes
<i>profilerexport_settings</i>	<object>	Configuration of the Profiler Export	
<i>profilerexport_settings.profilers</i>	<array of <object>>	List of profilers	
<i>profilerexport_settings.profilers</i> [profiler]	<object>	Description of a single profiler	
<i>profilerexport_settings.profilers</i> [profiler].status	<object>	Information on a profiler connection	Optional
<i>profilerexport_settings.profilers</i> [profiler].status.state	<string>	Connection state of a profiler	Values: OK, ERROR, DISABLED
<i>profilerexport_settings.profilers</i> [profiler].status.cause	<string>	In case of connection error this field contains the cause	Optional
<i>profilerexport_settings.profilers</i> [profiler].sync	<object>		Optional

<code>profilerexport_settingsprofilers [profiler].sync.sync_port_groups</code>	<code><boolean></code>		
<code>profilerexport_settingsprofilers [profiler].sync.sync_layer4_mappings</code>	<code><boolean></code>		
<code>profilerexport_settingsprofilers [profiler].sync.sync_custom_applications</code>	<code><boolean></code>		
<code>profilerexport_settingsprofilers [profiler].sync.sync_port_names</code>	<code><boolean></code>		
<code>profilerexport_settingsprofilers [profiler].address</code>	<code><string></code>	Address of a profiler, either IP or full qualified name	
<code>profilerexport_settings.enabled</code>	<code><boolean></code>	Enable/disable the Profiler Export	
<code>profilerexport_settings.adapter_ports</code>	<code><array of <object>></code>	List of the capture physical ports installed on the appliance	
<code>profilerexport_settings.adapter_ports [adapter_port]</code>	<code><object></code>	Description of a single physical capture port	
<code>profilerexport_settings.adapter_ports [adapter_port].bpf_filter</code>	<code><string></code>	BPF filter applied on the traffic captured on the capture port	Optional
<code>profilerexport_settings.adapter_ports [adapter_port].voip_enabled</code>	<code><boolean></code>	Enable/disable the export of VoIP metrics to profiler	
<code>profilerexport_settings.adapter_ports [adapter_port].name</code>	<code><string></code>	Name of the capture port, unique on the appliance	
<code>profilerexport_settings.adapter_ports [adapter_port].dpi_enabled</code>	<code><boolean></code>	Enable/disable the export of Application tags to profiler	Optional
<code>profilerexport_settings.adapter_ports [adapter_port].enabled</code>	<code><boolean></code>	Enable/disable the export on the capture port	
<code>profilerexport_settings.adapter_ports [adapter_port].description</code>	<code><string></code>	Description of the capture port	Optional
<code>profilerexport_settings.valid_license</code>	<code><boolean></code>		Optional

snmp_settings

SNMP configuration for this Shark

JSON

```
{
  "username": string,
  "version": string,
  "privacy": {
    "protocol": string,
    "passphrase": string
  },
  "enabled": boolean,
  "community": string,
  "authentication": {
    "protocol": string,
    "passphrase": string
  },
  "contact": string,
  "location": string,
  "security_level": string,
  "description": string
}
```

Example:

```
{
  "username": "admin",
  "description": "shark",
  "enabled": true,
  "contact": "admin@foo.com",
  "authentication": {
    "protocol": "SHA",
    "passphrase": "passphrase123"
  },
  "version": "V3",
  "location": "6th Floor West",
  "security_level": "AUTH_NO_PRIVACY"
}
```

Property Name	Type	Description	Notes
<code>snmp_settings</code>	<code><object></code>	SNMP configuration for this Shark	
<code>snmp_settings.username</code>	<code><string></code>	(Required for V3) SNMP user name	Optional

<code>snmp_settings.version</code>	<code><string></code>	SNMP version	Values: V1, V2C, V3
<code>snmp_settings.privacy</code>	<code><object></code>	(Required with SNMP privacy) SNMP privacy information	Optional
<code>snmp_settings.privacy.protocol</code>	<code><string></code>	Privacy protocol	Values: DES, AES
<code>snmp_settings.privacy.passphrase</code>	<code><string></code>	Privacy passphrase (must be at least 8 characters long)	
<code>snmp_settings.enabled</code>	<code><boolean></code>	'true' if SNMP is enabled, 'false' otherwise	
<code>snmp_settings.community</code>	<code><string></code>	(Required for V1 and V2C) SNMP community string	Optional
<code>snmp_settings.authentication</code>	<code><object></code>	(Required with SNMP authentication) SNMP authentication information	Optional
<code>snmp_settings.authentication.protocol</code>	<code><string></code>	Authentication protocol	Values: MD5, SHA
<code>snmp_settings.authentication.passphrase</code>	<code><string></code>	Authentication passphrase (must be at least 8 characters long)	
<code>snmp_settings.contact</code>	<code><string></code>	(Optional) SNMP contact string	Optional
<code>snmp_settings.location</code>	<code><string></code>	(Optional) SNMP location string	Optional
<code>snmp_settings.security_level</code>	<code><string></code>	(Required for V3) SNMP security level	Optional; Values: NO_AUTH_NO_PRIVACY, AUTH_NO_PRIVACY, AUTH_PRIVACY
<code>snmp_settings.description</code>	<code><string></code>	(Optional) SNMP description string	Optional

timestamp-hp

High precision timestamp value.

Since REST API clients may have very different needs and capabilities when it comes to handling high-precision timestamps, the API supports multiple encodings for timestamps with higher precision than a seconds.

The format of a high-precision timestamp value in a request or response object is defined by three attributes: `<units>`, `<precision>` `<type>`

- units: s, ms, us, ns
- precision: .ms, .us, .ns (*optional*)
- type: string, number (*only relevant for JSON*)

Here are a few examples:

Format	Value	XML	JSON
s string	1336086278.462862235	1336086278	"1336086278"
s number	1336086278.462862235	1336086278	1336086278
s.ns string	1336086278.462862235	1336086278.462862235	"1336086278.462862235"
s.ns number	1336086278.462862235	1336086278.462862235	1336086278.462862235
s.ms string	1336086278.462862235	1336086278.462	"1336086278.462"
ns string	1336086278.462862235	1336086278462862235	"1336086278462862235"
ns number	1336086278.462862235	1336086278462862235	1336086278462862235

To select a specific timestamp format to be used in the request and response body for any REST API call, the client must indicate the desired format in the X-RBT-High-Precision-Timestamp-Format HTTP Header. The same value applies to both the request and response structures.

For example, to select nanosecond units formatted as a string (for JSON), the header would be specified as X-RBT-High-Precision-Timestamp-Format: ns string.

If the header is not supplied by the client, the default encoding is ns number.

The selection of the type "string" versus "number" is only relevant for JSON (since in XML everything is a string), and the choice depends on the client's particular characteristics. For example, JavaScript can only represent a 53-bit integer value before losing precision. That corresponds to roughly microsecond resolution, so it is not possible to store "ns number" values in a JavaScript integer with full precision, hence a JavaScript client that requires sub-microsecond precision must use a string encoding and parse the number manually. However, since Python has no such constraints, the easiest encoding to work with would be a nanosecond number.

user

Information about a user account

JSON

```

{
  "is_locked": boolean,
  "can_be_locked": boolean,
  "is_admin": boolean,
  "name": string,
  "groups": [
    string
  ]
}

```

Example:

```

{
  "is_locked": false,
  "can_be_locked": false,
  "is_admin": true,
  "name": "admin",
  "groups": [
    "Administrators"
  ]
}

```

Property Name	Type	Description	Notes
<i>user</i>	< <i>object</i> >	Information about a user account	
<i>user.is_locked</i>	< <i>boolean</i> >	Indication if the user account is locked	
<i>user.can_be_locked</i>	< <i>boolean</i> >	Indication if the user account can be locked	
<i>user.is_admin</i>	< <i>boolean</i> >	Indication if the user is an administrator	
<i>user.name</i>	< <i>string</i> >	User name	
<i>user.groups</i>	< <i>array of string</i> >	List of groups of which the user is a member	
<i>user.groups[group]</i>	< <i>string</i> >		

view

View configuration

JSON

```

{
  "info": {
    "description": string,
    "title": string
  },
  "processors": [
    {
      "keys": [
        {
          "default_value": string,
          "field": string,
          "id": string
        }
      ],
      "metrics": [
        {
          "default_value": string,
          "field": string,
          "operation": string,
          "id": string
        }
      ],
      "id": string,
      "filters": [ filter ],
      "outputs": [
        {
          "fields": [
            {
              "operation": string,
              "id": string,
              "description": string
            }
          ],
          "id": string
        }
      ]
    }
  ],
  "parameters": {
    "sampling_time_msec": number,
    "autoclose_idle_timeout_msec": number,
    "retention_time_msec": number
  }
}

```

```

retention_time_insec : number
},
"watches": [ watch ],
"client_config": string,
"input_source": {
  "disable_index": boolean,
  "path": string,
  "filters": [ filter ]
}
}
}

```

Example:

```

{
  "info": {
    "description": "Network Usage by Traffic Type",
    "title": "Network Usage by Traffic Type"
  },
  "processors": [
    {
      "keys": [
        {
          "field": "generic.application",
          "id": "c1"
        }
      ],
      "metrics": [
        {
          "field": "generic.bits",
          "operation": "TIME_AVG",
          "id": "c2"
        },
        {
          "field": "generic.bits",
          "operation": "SUM",
          "id": "c3"
        }
      ],
      "id": "PUID_Overview_Grid",
      "filters": [],
      "outputs": [
        {
          "fields": [
            {
              "id": "c1",
              "description": "Traffic Type"
            },
            {
              "id": "c2",
              "description": "Bits"
            }
          ],
          "id": "OID_Output_Over_Time"
        },
        {
          "fields": [
            {
              "id": "c1",
              "description": "Traffic Type"
            },
            {
              "id": "c3",
              "description": "Bits"
            }
          ],
          "id": "OID_Output_Aggregated"
        }
      ]
    }
  ],
  "parameters": {
    "sampling_time_msec": 1000,
    "retention_time_msec": 86400000
  },
  "watches": [],
  "client_config": "<CACEPilotConfiguration xmlns:xsi='http://www.w3.org/2001/XMLSchema-instance'
xsi:noNamespaceSchemaLocation='..\..\..\..\..\specs\XML\PilotConfig.xsd'>\n\t<Version
Client='3.6'>\n\t<Info>\n\t\t<Title>Network Usage by Traffic Type</Title>\n\t\t<Description>Network Usage by Traffic
Type</Description>\n\t\t<Info>This view gives a great overview of how the network is utilized by the different protocols and
applications. It breaks the network traffic into the following categories: Routing, Web, Email, Data Transfer, SSH/Telnet, MS networking,
SNMP, VPN/Tunnel, Remote-Desktop, VoIP, Database, IM.</Info>\n\t\t<Notes Subject='Warning'>The protocol transported by TCP or
UDP are discovered by a port lookup, not by payload inspection. This makes this view very fast and suitable for high speed networks.
On the other side, it could cause false positives. For example, all the traffic on TCP port 80 will be reported as &quot;Web&quot;.
</Notes>\n\t</Info>\n\t<DisplaysData>\n\t\t<DisplayData
DisplayUId='DUID_Over_Time'>\n\t\t\t<DataSources>\n\t\t\t\t<DataSource OutputUId='OID_Output_Over_Time'
RefreshInterval='1000'>\n\t\t\t\t</DataSources>\n\t\t\t</DisplayData>\n\t\t\t<DisplayData
DisplayUId='DUID_Total'>\n\t\t\t\t<DataSources>\n\t\t\t\t\t<DataSource OutputUId='OID_Output_Aggregated'
RefreshInterval='1000'>\n\t\t\t\t\t</DataSources>\n\t\t\t\t</DisplayData>\n\t\t\t\t<DisplayData
DisplayUId='DUID_Total_Pie'>\n\t\t\t\t\t<DataSources>\n\t\t\t\t\t\t<DataSource OutputUId='OID_Output_Aggregated'

```

```

RefreshInterval="1000"/>\n\t\t\t</DataSources>\n\t\t\t</DisplayData>\n\t\t\t</DisplaysData>\n\t\t\t<DisplayUI
ComponentName="StripChart" DisplayUID="DUID_Over_Time">\n\t\t\t<DisplayProperties>\n\t\t\t\t<Property Name="Title"
Value="Bits Over Time"/>\n\t\t\t\t<Property Name="ColorRule" Value="Dimension"/>\n\t\t\t\t<Property Name="ColorParameter"
Value="x0"/>\n\t\t\t\t<Property Name="TimeFormatStr" Value="HH:mm:ss"/>\n\t\t\t\t<Property Name="LegendDimension"
Value="113"/>\n\t\t\t\t<Property Name="YAxisLabel"
Value="Bits/s"/>\n\t\t\t\t<DisplayProperties>\n\t\t\t\t\t<Help>\n\t\t\t\t\t<Text>Amount of bits per second for each type of network traffic,
charted over time.</Text>\n\t\t\t\t\t</Help>\n\t\t\t\t</DisplayUI>\n\t\t\t\t<DisplayUI ComponentName="SingleBars"
DisplayUID="DUID_Total">\n\t\t\t\t<DisplayProperties>\n\t\t\t\t\t<Property Name="Title" Value="Total Bits"/>\n\t\t\t\t\t<Property
Name="ShowLegend" Value="False"/>\n\t\t\t\t\t<Property Name="LegendDimension" Value="105"/>\n\t\t\t\t\t<Property
Name="YAxisLabel" Value="Total Bits"/>\n\t\t\t\t\t<Property Name="PxFromBottomBorder" Value="60"/>\n\t\t\t\t\t<Property
Name="UserPageSize" Value="30"/>\n\t\t\t\t\t<Property Name="ColorRule" Value="Dimension"/>\n\t\t\t\t\t<Property
Name="ColorParameter" Value="x0"/>\n\t\t\t\t</DisplayProperties>\n\t\t\t\t<Help Visible="False">\n\t\t\t\t<Text>Total network
usage for the different types of network traffic, during the visualized time interval.</Text>\n\t\t\t\t</Help>\n\t\t\t\t<DisplayUI>\n\t\t\t\t<DisplayUI ComponentName="Pie"
DisplayUID="DUID_Total_Pie">\n\t\t\t\t<DisplayProperties>\n\t\t\t\t\t<Property Name="Title" Value="Relative Network
Usage"/>\n\t\t\t\t\t<Property Name="LegendPosition" Value="Right"/>\n\t\t\t\t\t<Property Name="PieLabelType"
Value="Percentage"/>\n\t\t\t\t\t<Property Name="ColorParameter" Value="x0"/>\n\t\t\t\t\t<Property Name="ColorRule"
Value="Dimension"/>\n\t\t\t\t\t<DisplayProperties>\n\t\t\t\t\t\t<Help>\n\t\t\t\t\t\t<Text>Relative network usage for the different types of
network traffic, during the visualized time interval.</Text>\n\t\t\t\t\t</Help>\n\t\t\t\t</DisplayUI>\n\t\t\t\t<DisplaysUILayout>\n\t\t\t\t\t<dotnetbarlayout version="6"
zorder="3,4,1,2"/>\n\t\t\t\t\t<documents>\n\t\t\t\t\t\t<dockcontainer h="0" orientation="1" w="0"/>\n\t\t\t\t\t\t<barcontainer
h="311" w="978"/>\n\t\t\t\t\t\t\t<bar dockline="0" dockoffset="0" dockside="5" layout="2" name="BaseBar"
seldocktab="0" state="2" visible="true"/>\n\t\t\t\t\t\t\t<items>\n\t\t\t\t\t\t\t\t<item name="DUID_Over_Time" origBar=""
origPos="-1" pos="0"/>\n\t\t\t\t\t\t\t\t</items>\n\t\t\t\t\t\t\t\t</bar>\n\t\t\t\t\t\t\t\t</barcontainer>\n\t\t\t\t\t\t\t\t<dockcontainer h="311"
orientation="0" w="978"/>\n\t\t\t\t\t\t\t\t\t<barcontainer h="279" w="487"/>\n\t\t\t\t\t\t\t\t\t\t<bar ahanim="0"
autocaptionsync="true" cancust="false" candockbottom="false" candockdoc="true" candockleft="false" candockright="false"
candocktab="true" candocktop="false" canhide="false" canundock="false" custom="true" dockline="0" dockside="5"
eqbutton="false" fontemsiz="8.25" fontname="Microsoft Sans Serif" fontstyle="0" grabhandle="0" imagesize="0"
itemsp="0" layout="2" menubar="false" name="DUID_Total" seldocktab="0" showtab="true" state="2" stretch="true"
style="4" tabalign="2" tabnav="true" text="Total Bits" themes="false" visible="true" wrapdock="false"
wrapfloat="true"/>\n\t\t\t\t\t\t\t\t\t\t<items>\n\t\t\t\t\t\t\t\t\t\t\t<item name="DUID_Total" origBar="" origPos="-1"
pos="0"/>\n\t\t\t\t\t\t\t\t\t\t\t</items>\n\t\t\t\t\t\t\t\t\t\t\t</bar>\n\t\t\t\t\t\t\t\t\t\t\t</barcontainer>\n\t\t\t\t\t\t\t\t\t\t\t<barcontainer h="279"
w="488"/>\n\t\t\t\t\t\t\t\t\t\t\t\t<bar ahanim="0" autocaptionsync="true" cancust="false" candockbottom="false" candockdoc="true"
candockleft="false" candockright="false" candocktab="true" candocktop="false" canhide="false" canundock="false"
custom="true" dockline="0" dockside="5" eqbutton="false" fontemsiz="8.25" fontname="Microsoft Sans Serif"
fontstyle="0" grabhandle="0" imagesize="0" itemsp="0" layout="2" menubar="false" name="DUID_Total_Pie"
seldocktab="0" showtab="true" state="2" stretch="true" style="4" tabalign="2" tabnav="true" text="Relative Network
Usage" themes="false" visible="true" wrapdock="false" wrapfloat="true"/>\n\t\t\t\t\t\t\t\t\t\t\t\t<items>\n\t\t\t\t\t\t\t\t\t\t\t\t\t<item
name="DUID_Total_Pie" origBar="" origPos="-1"
pos="0"/>\n\t\t\t\t\t\t\t\t\t\t\t\t\t</items>\n\t\t\t\t\t\t\t\t\t\t\t\t\t</bar>\n\t\t\t\t\t\t\t\t\t\t\t\t\t</barcontainer>\n\t\t\t\t\t\t\t\t\t\t\t\t</dockcontainer>\n\t\t\t\t\t\t\t\t\t\t\t</dockcontai
"input_source": {
  "disable_index": false,
  "path": "fs/admin/pcap/noon.cap",
  "filters": [
    {
      "type": "SHARK",
      "value": "generic.frame.valid = true"
    },
    {
      "type": "DECRYPT",
      "value": "true"
    }
  ]
}
}
}
}

```

Property Name	Type	Description	Notes
view	<object>	View configuration	
view.info	<object>	View information section	Optional
view.info.description	<string>	View description	Optional
view.info.title	<string>	View title	Optional
view.processors	<array of <object>>	Processors configuration	Minimum: 1
view.processors[processor]	<object>	Processor configuration	
view.processors[processor].keys	<array of <object>>	List of fields that will act as keys in this configuration	
view.processors[processor].keys[key]	<object>		
view.processors[processor].keys[key].default_value	<string>	Default value, if needed	Optional
view.processors[processor].keys[key].field	<string>	Field name according to the Shark syntax	
view.processors[processor].keys[key].id	<string>	Alias that can be given to the field, used as identifier in the output configuration	
view.processors[processor].metrics	<array of <object>>	List of fields that will act as metrics in this configuration	

<code>view.processors[processor].metrics[metric]</code>	<code><object></code>		
<code>view.processors[processor].metrics[metric].default_value</code>	<code><string></code>	Default value, if needed	Optional
<code>view.processors[processor].metrics[metric].field</code>	<code><string></code>	Field name according to the Shark syntax	
<code>view.processors[processor].metrics[metric].operation</code>	<code><string></code>	Calculation type	Values: NONE, SUM, MAX, MIN, AVG, TIME_AVG
<code>view.processors[processor].metrics[metric].id</code>	<code><string></code>	Alias that can be given to the field, used as identifier in the output configuration	
<code>view.processors[processor].id</code>	<code><string></code>	Processor Id	
<code>view.processors[processor].filters</code>	<code><array of <filter>></code>	Filter list for the processor	
<code>view.processors[processor].filters[filter]</code>	<code><filter></code>	Instance of a <code><filter></code>	
<code>view.processors[processor].outputs</code>	<code><array of <object>></code>	Output list for the processor	
<code>view.processors[processor].outputs[output]</code>	<code><object></code>		
<code>view.processors[processor].outputs[output].fields</code>	<code><array of <object>></code>	List of requested fields in the output	
<code>view.processors[processor].outputs[output].fields[field]</code>	<code><object></code>		
<code>view.processors[processor].outputs[output].fields[field].operation</code>	<code><string></code>	Further output operation, if needed. Notice that using this might reduce performance.	Optional; Default is NONE; Values: NONE, AVG, COUNT, MAX, MIN, SUM
<code>view.processors[processor].outputs[output].fields[field].id</code>	<code><string></code>	Id of the field. This is the same of the processor configuration.	
<code>view.processors[processor].outputs[output].fields[field].description</code>	<code><string></code>	Description, if needed	Optional
<code>view.processors[processor].outputs[output].id</code>	<code><string></code>	Output Id	
<code>view.parameters</code>	<code><object></code>	View main configuration parameters section	
<code>view.parameters.sampling_time_msec</code>	<code><number></code>	View data sampling time	Optional; Default is 1000
<code>view.parameters.autoclose_idle_timeout_msec</code>	<code><number></code>	Autoclose timeout: if set, the view will be closed if it is not accessed for a period of time equal to the timeout value	Optional; Default is 0
<code>view.parameters.retention_time_msec</code>	<code><number></code>	Data retention time: data collected for a view will be deleted after the retention time elapsed	Optional; Default is 86400000
<code>view.watches</code>	<code><array of <watch>></code>	Watch list	
<code>view.watches[watch]</code>	<code><watch></code>	Instance of a <code><watch></code>	
<code>view.client_config</code>	<code><string></code>	Client-specific section, not used by Shark	Optional; Encoded as CDATA in XML
<code>view.input_source</code>	<code><object></code>	Input source configuration	
<code>view.input_source.disable_index</code>	<code><boolean></code>	If true, the source will not be allowed to use an index to speed up the processing	Optional
<code>view.input_source.path</code>	<code><string></code>	Path of the source to open	Specifies a job, clip, file or live device. Must start with the source type, e.g. fs/admin/trace.pcap or interfaces/tc0
<code>view.input_source.filters</code>	<code><array of <filter>></code>	List or filters for this input	
<code>view.input_source.filters[filter]</code>	<code><filter></code>	Instance of a <code><filter></code>	

watch

Watch configuration

JSON

```
{
  "info": {
    "group": string,
    "name": string,
    "description": string
  },
  "conversation_dimensions": [
    [
      string
    ]
  ],
  "severity": number,
  "triggers": [
```

```

    {
      "duration_info": {
        "duration_ms": number,
        "duration_type": string
      },
      "uid": string,
      "dimension_restrictions": dimension_restrictions,
      "repetition_info": {
        "number_of_times": number
      },
      "condition_operator": string,
      "bool_operator": string,
      "conditions": [
        {
          "field": string,
          "condition_info": {
            "aggregation_type": string,
            "check_type": string,
            "value": string,
            "second_value": string
          }
        }
      ]
    },
    "watch_uid": string,
    "enabled": boolean,
    "validity": {
      "to": {
        "value_type": string,
        "value_us": number
      },
      "from": {
        "value_type": string,
        "value_us": number
      }
    },
    "actions": {
      "actions": [
        {
          "type": string,
          "uid": string,
          "parameters": [
            {
              "name": string,
              "value": string,
              "custom": boolean
            }
          ],
          "side": string
        }
      ],
      "fired_triggers": {
        "bool_operator": string,
        "triggering_mode": string,
        "triggers": [
          string
        ]
      }
    },
    "timing": {
      "sampling_ms": number,
      "time_analysis_mode": string,
      "from": string,
      "interval_ms": number
    },
    "output_uid": string
  }
}

```

Example:

```

{
  "info": {
    "name": "Watch 1"
  },
  "severity": 6,
  "triggers": [
    {
      "condition_operator": "AND",
      "conditions": [
        {
          "field": "c2",
          "condition_info": {
            "aggregation_type": "VALUE",
            "value": "0",
            "check_type": "GREATER"
          }
        }
      ]
    }
  ]
}

```

```

    ],
    "bool_operator": "OR",
    "dimension_restrictions": {
      "sub_restrictions": [],
      "restrictions": [
        {
          "field": "c1",
          "value": "Web"
        }
      ]
    },
    "bool_operator": "OR"
  },
  "uid": "Trigger 1"
}
],
"watch_uid": "watch_1",
"enabled": true,
"actions": {
  "fired_triggers": {
    "bool_operator": "AND",
    "triggering_mode": "LEADINGEDGE",
    "triggers": [
      "Trigger 1"
    ]
  },
  "actions": [
    {
      "type": "InternalDBLog",
      "uid": "Action 1",
      "parameters": [],
      "side": "SERVER"
    }
  ]
},
"timing": {
  "from": "NOW",
  "time_analysis_mode": "SAMPLE_BY_SAMPLE",
  "interval_ms": 1000
},
"output_uid": "OUID_Output_Over_Time"
}

```

Property Name	Type	Description	Notes
<i>watch</i>	<object>	Watch configuration	
<i>watch.info</i>	<object>	Watch info section	
<i>watch.info.group</i>	<string>	Watch group. Can be used to organize the watches.	Optional
<i>watch.info.name</i>	<string>	Watch human-friendly name	
<i>watch.info.description</i>	<string>	Watch human-friendly description	Optional
<i>watch.conversation_dimensions</i>	<array of <array of <string>>>	This is used when the watch is supposed to treat two dimensions as if they are part of a single connection. For example, the source and destination ip addresses of a conversation ring. The watch will detect a connection and include the traffic coming from both the senders in a single value to check.	Optional
<i>watch.conversation_dimensions</i> [conversation_group]	<array of <string>>		
<i>watch.conversation_dimensions</i> [conversation_group][field_name]	<string>		
<i>watch.severity</i>	<number>	Severity, specified as an integer number with with syslog convention	Optional; Default is 5
<i>watch.triggers</i>	<array of <object>>	List of the events that are watched. An event is something like "bandwidth bigger than 1000" or "packets for host 1.2.3.4 smaller than 10 for more than a minute".	
<i>watch.triggers</i> [trigger]	<object>		
<i>watch.triggers</i> [trigger].duration_info	<object>	Information about the amount of time the value crosses the threshold before the event is triggered. If this field is not present, the server event will be triggered after the first sampling interval in which the value is beyond the threshold. The duration must be a multiple of the view sampling time, otherwise the server will return an error.	Optional
<i>watch.triggers</i> [trigger].duration_info. duration_ms	<number>	The duration time, in milliseconds. This must be a multiple of the view sampling time.	

<i>watch.triggers</i> [trigger].duration_info.duration_type	<string>	Type of duration	Values: NOT_INITIALIZED, MORE_THAN, EQUALS
<i>watch.triggers</i> [trigger].uid	<string>	The unique identifier of the event	
<i>watch.triggers</i> [trigger].dimension_restrictions	<dimension_restrictions>	The list of dimension restrictions	
<i>watch.triggers</i> [trigger].repetition_info	<object>	Information about how many times the threshold needs to be crossed in order for the event to become signaled	Optional
<i>watch.triggers</i> [trigger].repetition_info.number_of_times	<number>	How many times the threshold needs to be crossed in order for the event to become signaled	
<i>watch.triggers</i> [trigger].condition_operator	<string>	The boolean operation to apply: "And" or "Or"	Values: NOT_INITIALIZED, AND, OR
<i>watch.triggers</i> [trigger].bool_operator	<string>	The boolean operation to apply: "And" or "Or"	Values: NOT_INITIALIZED, AND, OR
<i>watch.triggers</i> [trigger].conditions	<array of <object>>	The list of conditions that will have to be validated in order for the event to be satisfied. If multiple conditions are present, the event is satisfied according to the operation value.	
<i>watch.triggers</i> [trigger].conditions[condition]	<object>		
<i>watch.triggers</i> [trigger].conditions[condition].field	<string>	The numeric (or non-numeric) value that will be checked against the threshold. Non numeric values can be checked with the Equal, NotEqual and Exists operators. NOTE: the field name refers to the database column name (e.g. c2 or c5) (the base number is 1).	
<i>watch.triggers</i> [trigger].conditions[condition].condition_info	<object>	Generic information about this threshold	
<i>watch.triggers</i> [trigger].conditions[condition].condition_info.aggregation_type	<string>	The type of threshold value	Values: VALUE, PERCENTAGE, SUMVALUE, SUMPERCENTAGE, COUNT
<i>watch.triggers</i> [trigger].conditions[condition].condition_info.check_type	<string>	The type of check to perform	Values: EQUAL, NOT_EQUAL, LESS, LESS_OR_EQUAL, GREATER, GREATER_OR_EQUAL, INSIDE_RANGE, OUTSIDE_RANGE, EXISTS, TOPN_CHANGED
<i>watch.triggers</i> [trigger].conditions[condition].condition_info.value	<string>	The threshold value	Optional
<i>watch.triggers</i> [trigger].conditions[condition].condition_info.second_value	<string>	Second threshold value, when supported (e.g. Inside/Outside range).	Optional
<i>watch</i> .watch_uid	<string>	Watch Id	
<i>watch</i> .enabled	<boolean>	True if enabled	
<i>watch</i> .validity	<object>	Timing information for the watch. It specifies when the watch must be considered valid and keep under control.	Optional
<i>watch</i> .validity.to	<object>	Watch validity end time. If not specified, End time will be used.	
<i>watch</i> .validity.to.value_type	<string>	Validity type	Values: DEFAULT, NOT_SPECIFIED, START, END, RELATIVE, ABSOLUTE
<i>watch</i> .validity.to.value_us	<number>	Validity value, can be expressed as the absolute timestamp or relative time span depending on the type	
<i>watch</i> .validity.from	<object>	Watch validity start time. If not specified, Start time will be used.	
<i>watch</i> .validity.from.value_type	<string>	Validity type	Values: DEFAULT, NOT_SPECIFIED, START, END, RELATIVE, ABSOLUTE
<i>watch</i> .validity.from.value_us	<number>	Validity value, can be expressed as the absolute timestamp or relative time span depending on the type	
<i>watch</i> .actions	<object>	The actions to be performed when one or more events are signaled. Action examples are: start dumping to disk, create a report, start a view, etc.	
<i>watch</i> .actions.actions	<array of <object>>	Action list	
<i>watch</i> .actions.actions[action]	<object>		
<i>watch</i> .actions.actions[action].type	<string>	The type of action. This must correspond to the name of a Shark Probe's action plugin.	
<i>watch</i> .actions.actions[action].uid	<string>	Action Id	
<i>watch</i> .actions.actions[action].parameters	<array of <object>>	Parameter list	

<code>watch.actions.actions[action].parameters [parameter]</code>	<code><object></code>		
<code>watch.actions.actions[action].parameters [parameter].name</code>	<code><string></code>	Parameter name	
<code>watch.actions.actions[action].parameters [parameter].value</code>	<code><string></code>	Parameter value	
<code>watch.actions.actions[action].parameters [parameter].custom</code>	<code><boolean></code>	True if it is a custom parameter	Optional
<code>watch.actions.actions[action].side</code>	<code><string></code>	Who is in charge of performing the action, either server or client	Values: CLIENT, SERVER
<code>watch.actions.fired_triggers</code>	<code><object></code>	The list of events that need to be signaled AT THE SAME TIME in order for the watch actions to run	
<code>watch.actions.fired_triggers.bool_operator</code>	<code><string></code>	The boolean operation to apply: "And" or "Or"	Values: NOT_INITIALIZED, AND, OR
<code>watch.actions.fired_triggers.triggering_mode</code>	<code><string></code>	The condition that will cause a line to be considered true	Values: ONESHOT, LEADINGEDGE, CONTINUOUS, TRAILINGEDGE, LEADING_AND_TRAILING_EDGE
<code>watch.actions.fired_triggers.triggers</code>	<code><array of <string>></code>	The List of unique ids of the events that need to be signaled	
<code>watch.actions.fired_triggers.triggers [trigger_uid]</code>	<code><string></code>		
<code>watch.timing</code>	<code><object></code>	Information about the window that is considered by the watch during every check	
<code>watch.timing.sampling_ms</code>	<code><number></code>		Optional
<code>watch.timing.time_analysis_mode</code>	<code><string></code>	Specification of the type of analysis for the data samples	Optional; Values: SAMPLE_BY_SAMPLE, AGGREGATED; If SAMPLE_BY_SAMPLE, checks every sample and applies the conditions to it (stripchart style). If AGGREGATED, aggregates per interval_ms to calculate the value for the conditions (barchart style).
<code>watch.timing.from</code>	<code><string></code>	The time interval that the watch will cover	Optional; Values: NOT_INITIALIZED, NOW, BEGINNING_OF_VIEW, SECOND, MINUTE, HOUR, DAY, WEEK, MONTH, YEAR; This is the time window that the watch must consider during every check.
<code>watch.timing.interval_ms</code>	<code><number></code>	The time interval that the watch will cover. This is the time window that the watch must consider during every check.	Optional
<code>watch.output_uid</code>	<code><string></code>	Output Id that the watch refers to	

Error Codes

In the event that an error occurs while processing a request, the server will respond with appropriate HTTP status code and additional information in the response body:

```
{
  "error_id": "{error identifier}",
  "error_text": "{error description}",
  "error_info": {error specific data structure, optional}
}
```

The table below lists the possible errors and the associated HTTP status codes that may returned.

Error ID	HTTP Status	Comments
REQUEST_INVALID_INPUT	400	The request is invalid
AUTH_REQUIRED	401	Missing authentication credentials
AUTH_INVALID_CREDENTIALS	401	Invalid user name or password
AUTH_INVALID_SESSION	401	The authentication session has timed out or is invalid
AUTH_EXPIRED_PASSWORD	401	Account password has expired
AUTH_INVALID_CODE	401	The Oauth access code is invalid
AUTH_EXPIRED_TOKEN	401	The Oauth token has expired
AUTH_EXPIRED_CODE	401	The Oauth access code has expired
AUTH_DISABLED_ACCOUNT	403	Account has been disabled
AUTH_FORBIDDEN	403	Account does not have privileges for this request
AUTH_INVALID_TOKEN	403	The Oauth token is invalid
RESOURCE_NOT_FOUND	404	The requested resource was not found

HTTP_INVALID_METHOD	405	The requested method is not supported by this resource
INTERNAL_ERROR	500	Internal error occurred