# PVTD Restful API

**Version 1.0**

**www.marathon-networks.com**

# Table of Contents

# Preface

PVTD Restful API is to be used by NMS or any other application to retrieve data from PVTD in a programatic way.

Restful communication is done using HTTPS, and PVTD should be configured to allow HTTPS connections using the *set web_enable* and *add web_allowedv4* CLI commands.

CLI users are used to authenticate to PVTD.

PVTD web interface was built using static pages, ajax and PVTD's Restful APIs.

# Authentication

There are two authentication methods: sessions with cookies and HTTP basic authentication.

## Sessions with cookies

To obtain a valid session cookie, you must first authenticate to PVTD using the *Vrest/authenticate* command.

After authentication the session cookie is valid for 30 minutes.

## HTTP Basic Authentication

Add 'ws' to the query string to use HTTP Basic Authentication. For example, to get PVTD statistics use GET /rest/system/stats?ws

# MISC commands

## /rest/authenticate
Authenticate to PVTD and get a session cookie.

**Method**
POST

**Query string elements description**

| username | The username to authenticate |
|----------|-------------------------------|
| password | The user's password.         |

**Permissions**
Any user

**Output**
None

**History**

| 1.0 | Command first appearance |
|-----|--------------------------|

**Guide**
Usernames and passwords are case sensitive.

## /rest/logout
Logout and invalidate session cookie.

**Method**
POST

**Query string elements description**
None.

**Permissions**
Any user

**Output**
None

**History**

| 1.0 | Command first appearance |
|-----|--------------------------|

**Guide**

None.

# /rest/hosts commands

Get information about active hosts in the PVLAN network.

## /rest/hosts/ipv4

Get information about IPv4 hosts in the PVLAN network.

**Method**

GET

**Query string elements description**

| | |
|---|---|
| ws | Include this to use HTTP basic authentication |
| ipv4 | IPv4 filter. |
| vlan | VLAN filter. |
| Mac | MAC address filter |

**Permissions**

Any user

**Output**

XML of list of IPv4 hosts complying to the filters.

Example:

```
<?xml version="1.0" ?>
<rest_hosts_ipv4-response>
    <hosts>
        <host>
            <ipv4>10.10.0.2</ipv4>
            <vlan>1000</vlan>
            <mac>000b.1010.0002</mac>
        </host>
        <host>
            <ipv4>10.10.0.3</ipv4>
            <vlan>1000</vlan>
            <mac>000b.1010.0003</mac>
        </host>
    </hosts>
</rest_hosts_ipv4-response>
```

**History**

| | |
|---|---|
| 1.0 | Command first appearance |

**Guide**

Other than 'ws', all query strings are required, but can be empty.

Empty filters are ignored.

Asterisk (*) are allowed.

# /rest/system commands

Get information about PVTD appliance.

## /rest/system/hostname

Get PVTD's host name.

**Method**

GET

**Query string elements description**

| | |
|---|---|
| ws | Include this to use HTTP basic authentication |

**Permissions**

Any user

**Output**

String. Host name.

Example:

```
PVTD_Demo
```

**History**

| | |
|---|---|
| 1.0 | Command first appearance |

**Guide**

None.

# /rest/system/logs

Get PVTD's logs.

**Method**

GET

**Query string elements description**

| ws | Include this to use HTTP basic authentication |
|---|---|
| search | A search string to filter the log |
| lines | Number of last lines to retrieve. Max=999 |

**Permissions**

Any user

**Output**

String. Log entries.

Example:

```
Nov  2 23:13:28 pvtd_d pvtd[23893]: PVTD003-DEL_HOST-I: Host deleted due to timeout.
   SVLAN 1202 MAC 10.12.2.5 IPv4 000b.1012.0205
Nov  2 23:14:57 pvtd_d pvtd[23893]: PVTD002-NEW_HOST-I: New host found. SVLAN 1200 MAC
   000b.1012.0004 IPv4 10.12.0.4
Nov  2 23:17:01 pvtd_d pvtd[23893]: PVTD002-NEW_HOST-I: New host found. SVLAN 1101 MAC
   000b.1011.0104 IPv4 10.11.1.4
Nov  2 23:17:02 pvtd_d pvtd[23893]: PVTD002-NEW_HOST-I: New host found. SVLAN 1101 MAC
   000b.1011.0105 IPv4 10.11.1.5
Nov  2 23:17:03 pvtd_d pvtd[23893]: PVTD003-DEL_HOST-I: Host deleted due to timeout.
   SVLAN 1103 MAC 10.11.3.2 IPv4 000b.1011.0302
Nov  2 23:17:40 pvtd_d pvtd[23893]: PVTD003-DEL_HOST-I: Host deleted due to timeout.
   SVLAN 1101 MAC 10.11.1.3 IPv4 000b.1011.0103
Nov  2 23:18:19 pvtd_d pvtd[23893]: PVTD002-NEW_HOST-I: New host found. SVLAN 1000 MAC
   000b.1010.0003 IPv4 10.10.0.3
Nov  2 23:20:24 pvtd_d pvtd[23893]: PVTD003-DEL_HOST-I: Host deleted due to timeout.
   SVLAN 1001 MAC 10.10.1.2 IPv4 000b.1010.0102
Nov  2 23:21:13 pvtd_d pvtd[23893]: PVTD003-DEL_HOST-I: Host deleted due to timeout.
   SVLAN 1001 MAC 10.10.1.1 IPv4 000b.1010.0101
Nov  2 23:21:31 pvtd_d pvtd[23893]: PVTD002-NEW_HOST-I: New host found. SVLAN 1102 MAC
   000b.1011.0201 IPv4 10.11.2.1
```

**History**

| 1.0 | Command first appearance |
|---|---|

**Guide**

Other than 'ws', all query strings are required, but can be empty.

Empty filters are ignored and defaults are used. Default for *lines* is 100 and default for *search* is '.*'

*search* filed is a basic regular expression and its case insensitive.

PVTD will first filter the log with the *search* parameter and than return the last *lines*.

Only PVLAN related log entries are considered to be retrieved.

## /rest/system/stats

Get PVTD's counters.

**Method**

GET

**Query string elements description**

| | |
|---|---|
| ws | Include this to use HTTP basic authentication |

**Permissions**

Any user

**Output**

XML if PVTD counters.

Example:

```
<?xml version="1.0" ?>
<rest_system_stat-response>
      <counters>
            <cpu>0</cpu>
            <pvlan_interface>
                  <media>Ethernet autoselect (1000baseT full-duplex)</media>
                  <status>active</status>
                  <InPKTS>34442</InPKTS>
                  <InERR>0</InERR>
                  <OutPKTS>97788</OutPKTS>
                  <OutERR>0</OutERR>
            </pvlan_interface>
            <hostNum>47</hostNum>
            <license>50</license>
            <model>PVTD-5K01R</model>
      </counters>
</rest_system_stat-response>
```

**History**

| | |
|---|---|
| 1.0 | Command first appearance |

**Guide**

None.