



## **DPL Admin**

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# Introduction

DPL Admin is a CLI tool used for managing and inspecting the DPL Runtime daemon. It provides the following functionalities:

- Viewing the current configuration of the DPL Runtime daemon
- Reading the DPL Runtime Service logs
- Setting the log level for the DPL Runtime Service
- Retrieving the hardware steering dump, capabilities, and NVConfig of the DPL Runtime Service

## Options and Commands

Usage:

```
./dpl_admin.sh -a <host:port> [options] <command> [command-  
options]
```

Options:

- `-h`, `--help` – Displays help message and exits
- `-v`, `--version` – Displays `dpl_admin`'s version and exits
- `-a`, `--address` – Required; specifies `dpl_admin`'s server address (refer to agent config file) and port of the template ipv4/6: `[address] : [port]`. Examples:
  - `192.168.0.1:9600`
  - `ipv6:[2607:f8b0:400e:c00::ef]:443`
  - `ipv6:[::]:1234`

## config

Displays the DPL Runtime Service configuration information, including servers, logging, devices and HAL configurations.

- Usage:

```
./dpl_admin.sh -a <host:port> config
```

- Options:

- 

- `-h`, `- help` – Displays command's help message and exit

- Example:

```
./dpl_admin.sh -a 10.1.1.1:9600 config
```

- Output:

```
CONFIGURATION

servers
server_address  tcp_port

[::]            9559                                dpl_rt
[::]            9560                                dpl_nspect
[::]            9600                                admin

log                                                     name :
/var/log/doca/dpl_rtd/agent.log
```

level:

INFO

devices

controller attr	id	counter	cache	timeout [msec]
-----------------	----	---------	-------	----------------

port_id:	9876	name	port_id	mtu	mac
----------	------	------	---------	-----	-----

eth7	4	1514	00:00:00:00:00:00
------	---	------	-------------------

eth6	3	1514	00:00:00:00:00:00
------	---	------	-------------------

eth5	2	1514	00:00:00:00:00:00
------	---	------	-------------------

eth4	1	1514	00:00:00:00:00:00
------	---	------	-------------------

eth2	0	1514	00:00:00:00:00:00
------	---	------	-------------------

hal

number of queues: 1

queue size: 1024

```
burst size:      32
```

## set-counter-cache-timeout

Sets counter cache timeout for device.

- Usage:

```
./dpl_admin.sh -a <host:port> set-counter-cache-timeout --  
device_id/-did <DEVICE_ID> --timeout_value/-nto  
<TIMEOUT_VALUE>
```

- Options:

- `-h`, `- help` – Displays command's help message and exit
- `--device_id`, `-did` – Required; specifies device ID.
- `--timeout_value`, `-nto` – Required; specifies new counter cache time-out value

- Example:

```
./dpl_admin.sh -a 10.1.1.1:9600 set-counter-cache-timeout --  
device_id 1000 --timeout_value 3
```

- Output:

```
Device ID: 1000, new timeout: 3 msec
```

## set-log-level

Sets DPL Runtime Service's log level.

- Usage:

```
dpl_admin.sh -a <host:port> set-log-level --level <LOG_LEVEL>
```

- Options:

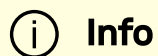
- `-h`, `- help` – Displays command's help message and exit
- `--level` – Required; new log level out of `{DISABLE, CRITICAL, ERROR, WARNING, INFO, DEBUG, TRACE}`

- Example:

```
./dpl_admin.sh -a 10.1.1.1:9600 set-log-level --level DEBUG
```

- Output:

```
dpl_rtd log level set to: 'DEBUG'
```



### Info

Setting log level is not persistent. DPL Admin restarts with log level according to config file.

## get-log-full

Reads DPL Runtime Service's log into a file.

- Usage:

```
./dpl_admin.sh -a <host:port> get-log-full
```

- Options:

- `-h`, `- help` – Displays command's help message and exit
- `--outpath` – Optional; specifies output log file path. Defaults to current directory.

- Example:

```
./dpl_admin.sh -a 10.1.1.1:9600 get-log-full --outpath  
'/tmp/dpl_agent.log'
```

- Output:

```
Find Log file at: '/tmp/dpl_agent.log'
```

## get-log-recent



Displays recent DPL Runtime Service's log lines.

- Usage:

```
./dpl_admin.sh -a <host:port> get-log-recent
```

- Options:

- `-h`, `- help` – Displays command's help message and exit
- `--number_of_lines` – Optional; specifies number of recent log lines to read. Defaults to 10.

- Example:

```
./dpl_admin.sh -a 10.1.1.1:9600 get-log-recent --  
number_of_lines 6
```

- Output:

```
[12:45:09:480451][73079][DOCA][INF][OnReadDone] New client  
connected to device 1000  
[12:45:09:481295][73078][DOCA][INF] A program was previously  
loaded, clearing it before applying new one...  
[12:45:09:481314][73078][DOCA][INF] [DPL Device 1000]  
Removing DPL program ...  
[12:45:09:498476][73078][DOCA][INF] [DPL Device 1000] DPL  
program was removed.  
[12:45:09:499432][73078][DOCA][INF] [DPL Device 1000] Loading  
DPL program ...  
[12:45:09:522419][73078][DOCA][INF] [DPL Device 1000] DPL  
program was loaded successfully.
```

## hws-dump

Dumps DPL Runtime Service's hardware steering rules into a file.

- Usage:

```
./dpl_admin.sh -a<host:port> hws-dump --device_id/-did  
<DEVICE_ID>
```

- Options:

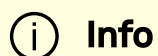
- `-h`, `- help` – Displays command's help message and exit
- `--device_id`, `-did` – Required; specifies device ID
- `--parser_args` – Optional; specifies arguments to pass to HWS dump tool
- `--outpath` – Optional; specifies output file path. Defaults to current directory.

- Example:

```
./dpl_admin.sh -a 10.1.1.1:9600 hws-dump --device_id 1000 --  
parser_args '\-vvv' --outpath '/tmp/dpl_hws_dump.txt'
```

- Output:

```
Find HWS dump file at: '/tmp/dpl_hws_dump.txt'
```



### Info

Intended as a debugging aid for developers.

## hca-capabilities

Dumps NIC HCA capabilities into a file.

- Usage:

```
./dpl_admin.sh -a<host:port> hca-capabilities --device_id/-  
did <DEVICE_ID>
```

- Options:

- `-h`, `- help` – Displays command's help message and exit
- `--device_id`, `-did` – Required; specifies device ID
- `--outputpath` – Optional; specifies output file path. Defaults to current directory.

- Example:

```
./dpl_admin.sh -a 10.1.1.1:9600 hca-capabilities --device_id  
1000 --outputpath '/tmp/dpl_hca_capabilities.json'
```

- Output:

```
Find HCA capabilities file at:  
'/tmp/dpl_hca_capabilities.json'
```

## nv-config

Dumps DPL Runtime Service's NV config into a file.

- Usage:

```
./dpl_admin.sh -a<host:port> nv-config --device_id/-did  
<DEVICE_ID>
```

- Options:

- `-h`, `- help` – Displays command's help message and exit
- `--device_id`, `-did` – Required; specifies device ID
- `--outputpath` – Optional; specifies output file path. Defaults to current directory.

- Example:

```
./dpl_admin.sh -a 10.1.1.1:9600 nv-config --device_id 1000 --  
outputpath '/tmp/dpl_nv_config.txt'
```

- Output:

```
Find NV config file at: '/tmp/dpl_nv_config.txt'
```

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