

**NAME**

ip-monitor, rtmon – state monitoring

**SYNOPSIS**

**ip monitor** [ **all** | *OBJECT-LIST* ] [ **file** *FILENAME* ] [ **label** ] [ **all-nsid** ] [ **dev** *DEVICE* ]

**OPTIONS****-t, -timestamp**

Prints timestamp before the event message on the separated line in format:

Timestamp: <Day> <Month> <DD> <hh:mm:ss> <YYYY> <usecs> usec  
<EVENT>

**-ts, -tshort**

Prints short timestamp before the event message on the same line in format:

[<YYYY>-<MM>-<DD>T<hh:mm:ss>.<ms>] <EVENT>

**DESCRIPTION**

The **ip** utility can monitor the state of devices, addresses and routes continuously. This option has a slightly different format. Namely, the **monitor** command is the first in the command line and then the object list follows:

**ip monitor** [ **all** | *OBJECT-LIST* ] [ **file** *FILENAME* ] [ **label** ] [ **all-nsid** ] [ **dev** *DEVICE* ]

*OBJECT-LIST* is the list of object types that we want to monitor. It may contain **link**, **address**, **route**, **mroute**, **prefix**, **neigh**, **netconf**, **rule** and **nsid**. If no **file** argument is given, **ip** opens RTNETLINK, listens on it and dumps state changes in the format described in previous sections.

If the **label** option is set, a prefix is displayed before each message to show the family of the message. For example:

```
[NEIGH]10.16.0.112 dev eth0 lladdr 00:04:23:df:2f:d0 REACHABLE [LINK]3: eth1: <BROADCAST,MULTICAST> mtu 1500 qdisc pfifo_fast state DOWN group default
link/ether 52:54:00:12:34:57 brd ff:ff:ff:ff:ff:ff
```

If the **all-nsid** option is set, the program listens to all network namespaces that have a nsid assigned into the network namespace where the program is running. A prefix is displayed to show the network namespace where the message originates. Example:

```
[nsid 0]10.16.0.112 dev eth0 lladdr 00:04:23:df:2f:d0 REACHABLE
```

If the **file** option is given, the program does not listen on RTNETLINK, but opens the given file, and dumps its contents. The file should contain RTNETLINK messages saved in binary format. Such a file can be generated with the **rtmon** utility. This utility has a command line syntax similar to **ip monitor**. Ideally, **rtmon** should be started before the first network configuration command is issued. F.e. if you insert:

```
rtmon file /var/log/rtmon.log
```

in a startup script, you will be able to view the full history later.

Nevertheless, it is possible to start **rtmon** at any time. It prepends the history with the state snapshot dumped at the moment of starting.

If the **dev** option is given, the program prints only events related to this device.

**SEE ALSO**

**ip**(8)

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