Rocky Enterprise Linux 9.2 Manual Pages on command 'networkctl.1'

$ man networkctl.1

NETWORKCTL(1)   networkctl   NETWORKCTL(1)

NAME

   networkctl - Query the status of network links

SYNOPSIS

   networkctl [OPTIONS...] COMMAND [LINK...]

DESCRIPTION

   networkctl may be used to introspect the state of the network links as seen by

   systemd-networkd. Please refer to systemd-networkd.service(8) for an introduction to the

   basic concepts, functionality, and configuration syntax.

COMMANDS

   The following commands are understood:

   list [PATTERN...]

      Show a list of existing links and their status. If one ore more PATTERNs are

      specified, only links matching one of them are shown. If no further arguments are

      specified shows all links, otherwise just the specified links. Produces output similar

      to:

        IDX LINK   TYPE   OPERATIONAL SETUP

         1 lo   loopback carrier   unmanaged

         2 eth0   ether   routable   configured

         3 virbr0   ether   no-carrier unmanaged

         4 virbr0-nic ether   off   unmanaged

        4 links listed.

   The operational status is one of the following:

missing

    the device is missing

off

    the device is powered down

no-carrier

    the device is powered up, but it does not yet have a carrier

dormant

    the device has a carrier, but is not yet ready for normal traffic

degraded-carrier

    for bond or bridge master, one of the bonding or bridge slave network interfaces

    is in off, no-carrier, or dormant state

carrier

    the link has a carrier, or for bond or bridge master, all bonding or bridge slave

    network interfaces are enslaved to the master

degraded

    the link has carrier and addresses valid on the local link configured

enslaved

    the link has carrier and is enslaved to bond or bridge master network interface

routable

    the link has carrier and routable address configured

The setup status is one of the following:

pending

    udev is still processing the link, we don't yet know if we will manage it

failed

    networkd failed to manage the link

configuring

    in the process of retrieving configuration or configuring the link

configured

    link configured successfully

unmanaged

    networkd is not handling the link

linger

    the link is gone, but has not yet been dropped by networkd

status [PATTERN...]

Show information about the specified links: type, state, kernel module driver,

hardware and IP address, configured DNS servers, etc. If one ore more PATTERNs are

specified, only links matching one of them are shown.

When no links are specified, an overall network status is shown. Also see the option

--all.

Produces output similar to:

　　　?　　　State: routable

　　　Online state: online

　　　　　Address: 10.193.76.5 on eth0

　　　　　　　192.168.122.1 on virbr0

　　　　　　　169.254.190.105 on eth0

　　　　　　　fe80::5054:aa:bbbb:cccc on eth0

　　　　　Gateway: 10.193.11.1 (CISCO SYSTEMS, INC.) on eth0

　　　　　　DNS: 8.8.8.8

　　　　　　　8.8.4.4

In the overall network status, the online state depends on the individual online state

of all required links. Managed links are required for online by default. In this case,

the online state is one of the following:

unknown

　　all links have unknown online status (i.e. there are no required links)

offline

　　all required links are offline

partial

　　some, but not all, required links are online

online

　　all required links are online

lldp [PATTERN...]

Show discovered LLDP (Link Layer Discovery Protocol) neighbors. If one or more

PATTERNs are specified only neighbors on those interfaces are shown. Otherwise shows

discovered neighbors on all interfaces. Note that for this feature to work, LLDP= must

be turned on for the specific interface, see systemd.network(5) for details.

Produces output similar to:

LINK	CHASSIS ID	SYSTEM NAME	CAPS	PORT ID	PORT DESCRIPTION
enp0s25	00:e0:4c:00:00:00	GS1900	..b........	2	Port #2

Capability Flags:

o - Other; p - Repeater; b - Bridge; w - WLAN Access Point; r - Router;

t - Telephone; d - DOCSIS cable device; a - Station; c - Customer VLAN;

s - Service VLAN, m - Two-port MAC Relay (TPMR)

1 neighbors listed.

label

Show numerical address labels that can be used for address selection. This is the same

information that ip-addrlabel(8) shows. See RFC 3484[1] for a discussion of address

labels.

Produces output similar to:

Prefix/Prefixlen	Label
::/0	1
fc00::/7	5
fec0::/10	11
2002::/16	2
3ffe::/16	12
2001:10::/28	7
2001::/32	6
::ffff:0.0.0.0/96	4
::/96	3
::1/128	0

delete DEVICE...

Deletes virtual netdevs. Takes interface name or index number.

up DEVICE...

Bring devices up. Takes interface name or index number.

down DEVICE...

Bring devices down. Takes interface name or index number.

renew DEVICE...

Renew dynamic configurations e.g. addresses received from DHCP server. Takes interface

name or index number.

forcerenew DEVICE...

Send a FORCERENEW message to all connected clients, triggering DHCP reconfiguration. Takes interface name or index number.

reconfigure DEVICE...

Reconfigure network interfaces. Takes interface name or index number. Note that this does not reload .netdev or .network corresponding to the specified interface. So, if you edit config files, it is necessary to call networkctl reload first to apply new settings.

reload

Reload .netdev and .network files. If a new .netdev file is found, then the corresponding netdev is created. Note that even if an existing .netdev is modified or removed, systemd-networkd does not update or remove the netdev. If a new, modified or removed .network file is found, then all interfaces which match the file are reconfigured.

OPTIONS

The following options are understood:

-a --all

Show all links with status.

-s --stats

Show link statistics with status.

-l, --full

Do not ellipsize the output.

-n, --lines=

When used with status, controls the number of journal lines to show, counting from the most recent ones. Takes a positive integer argument. Defaults to 10.

--json=MODE

Shows output formatted as JSON. Expects one of "short" (for the shortest possible output without any redundant whitespace or line breaks), "pretty" (for a pretty version of the same, with indentation and line breaks) or "off" (to turn off JSON output, the default).

-h, --help

Print a short help text and exit.

--version

Print a short version string and exit.

--no-legend

    Do not print the legend, i.e. column headers and the footer with hints.

--no-pager

    Do not pipe output into a pager.

EXIT STATUS

On success, 0 is returned, a non-zero failure code otherwise.

SEE ALSO

systemd-networkd.service(8), systemd.network(5), systemd.netdev(5), ip(8)

NOTES

 1. RFC 3484

   https://tools.ietf.org/html/rfc3484