

## NAME

ovn-nbctl – Open Virtual Network northbound db management utility

## SYNOPSIS

**ovn-nbctl** [*options*] *command* [*arg...*]

## DESCRIPTION

This utility can be used to manage the OVN northbound database.

## GENERAL COMMANDS

**show** [*lswitch*]

Prints a brief overview of the database contents. If *lswitch* is provided, only records related to that logical switch are shown.

## LOGICAL SWITCH COMMANDS

**lswitch-add** [*lswitch*]

Creates a new logical switch named *lswitch*. If *lswitch* is not provided, the switch will not have a name so other commands must refer to this switch by its UUID. Initially the switch will have no ports.

**lswitch-del** *lswitch*

Deletes *lswitch*.

**lswitch-list**

Lists all existing switches on standard output, one per line.

**lswitch-set-external-id** *lswitch* *key* [*value*]

Sets or clears an “external ID” value on *lswitch*. These values are intended to identify entities external to OVN with which *lswitch* is associated. The OVN Northbound database schema may specify well-known *key* values, but *key* and *value* are otherwise arbitrary strings.

If *value* is specified, then *key* is set to *value* for *lswitch*, overwriting any previous value. If *value* is omitted, then *key* is removed from *lswitch*’s set of external IDs (if it was present).

**lswitch-get-external-id** *lswitch* [*key*]

Queries the external IDs on *lswitch*. If *key* is specified, the output is the value for that *key* or the empty string if *key* is unset. If *key* is omitted, the output is *key=value*, one per line, for each key-value pair.

## ACL COMMANDS

**[--log] acl-add** *lswitch* *direction* *priority* *match* *action*

Adds the specified ACL to *lswitch*. *direction* must be either **from-lport** or **to-lport**. *priority* must be between **1** and **65534**, inclusive. If **--log** is specified, packet logging is enabled for the ACL. A full description of the fields are in **ovn-nb(5)**.

**acl-del** *lswitch* [*direction* [*priority* *match*]]

Deletes ACLs from *lswitch*. If only *lswitch* is supplied, all the ACLs from the logical switch are deleted. If *direction* is also specified, then all the flows in that direction will be deleted from the logical switch. If all the fields are given, then a single flow that matches all the fields will be deleted.

**acl-list** *lswitch*

Lists the ACLs on *lswitch*.

## LOGICAL PORT COMMANDS

**lport-add** *lswitch* *lport*

Creates on *lswitch* a new logical port named *lport*.

**lport-add** *lswitch* *lport* *parent* *tag*

Creates on *lswitch* a logical port named *lport* that is a child of *parent* that is identified with VLAN ID *tag*. This is useful in cases such as virtualized container environments where

Open vSwitch does not have a direct connection to the container's port and it must be shared with the virtual machine's port.

#### **lport-del** *lport*

Deletes *lport*.

#### **lport-list** *lswitch*

Lists all the logical ports within *lswitch* on standard output, one per line.

#### **lport-get-parent** *lport*

If set, get the parent port of *lport*. If not set, print nothing.

#### **lport-get-tag** *lport*

If set, get the tag for *lport* traffic. If not set, print nothing.

#### **lport-set-external-id** *lport* *key* [*value*]

Sets or clears an "external ID" value on *lport*. These values are intended to identify entities external to OVN with which *lport* is associated. The OVN Northbound database schema may specify well-known *key* values, but *key* and *value* are otherwise arbitrary strings.

If *value* is specified, then *key* is set to *value* for *lport*, overwriting any previous value. If *value* is omitted, then *key* is removed from *lport*'s set of external IDs (if it was present).

#### **lport-get-external-id** *lport* [*key*]

Queries the external IDs on *lport*. If *key* is specified, the output is the value for that *key* or the empty string if *key* is unset. If *key* is omitted, the output is *key=value*, one per line, for each key-value pair.

#### **lport-set-macs** *lport* [*mac*]...

Sets the MACs associated with *lport* to *mac*. Multiple MACs may be sets by using multiple *mac* arguments. If no *mac* argument is given, *lport* will have no MACs associated with it.

#### **lport-get-macs** *lport*

Lists all the MACs associated with *lport* on standard output, one per line.

#### **lport-set-port-security** *lport* [*addrs*]...

Sets the port security addresses associated with *lport* to *addrs*. Multiple sets of addresses may be set by using multiple *addrs* arguments. If no *addrs* argument is given, *lport* will not have port security enabled.

Port security limits the addresses from which a logical port may send packets and to which it may receive packets. See the **ovn-nb(5)** documentation for the **port\_security** column in the **Logical\_Port** table for details.

#### **lport-get-port-security** *lport*

Lists all the port security addresses associated with *lport* on standard output, one per line.

#### **lport-get-up** *lport*

Prints the state of *lport*, either **up** or **down**.

#### **lport-set-enabled** *lport* *state*

Set the administrative state of *lport*, either **enabled** or **disabled**. When a port is disabled, no traffic is allowed into or out of the port.

#### **lport-get-enabled** *lport*

Prints the administrative state of *lport*, either **enabled** or **disabled**.

#### **lport-set-type** *lport* *type*

Set the type for the logical port. No special types have been implemented yet.

#### **lport-get-type** *lport*

Get the type for the logical port.

**lport-set-options** *lport* [*key=value*]...

Set type-specific key-value options for the logical port.

**lport-get-options** *lport*

Get the type-specific options for the logical port.

## OPTIONS

**--db** *database*

The OVSDb database remote to contact. If the **OVN\_NB\_DB** environment variable is set, its value is used as the default. Otherwise, the default is **unix:/var/run/open-vswitch/db.sock**, but this default is unlikely to be useful outside of single-machine OVN test environments.

**-h** | **--help**

**-o** | **--options**

**-V** | **--version**

## LOGGING OPTIONS

**-vspec**, **--verbose=spec**

**-v**, **--verbose**

**--log-file**[=*file*]

**--syslog-target**=*host:port*

## PKI CONFIGURATION (REQUIRED TO USE SSL)

**-p**, **--private-key=***file* file with private key

**-c**, **--certificate=***file* file with certificate for private key

**-C**, **--ca-cert=***file* file with peer CA certificate