

NAME

ovn-ctl – Open Virtual Network northbound daemon lifecycle utility

SYNOPSIS

ovn-ctl [*options*] *command*

DESCRIPTION

This program is intended to be invoked internally by Open Virtual Network startup scripts. System administrators should not normally invoke it directly.

COMMANDS

start_northd
start_controller
start_controller_vtep
stop_northd
stop_controller
stop_controller_vtep
restart_northd
restart_controller
restart_controller_vtep
promote_ovnnb
promote_ovnsb
demote_ovnnb
demote_ovnsb
status_ovnnb
status_ovnsb
start_ovsdb
start_nb_ovsdb
start_sb_ovsdb
stop_ovsdb
stop_nb_ovsdb
stop_sb_ovsdb
restart_ovsdb
run_nb_ovsdb
run_sb_ovsdb

OPTIONS

--ovn-northd-priority=*NICE*
--ovn-northd-wrapper=*WRAPPER*
--ovn-controller-priority=*NICE*
--ovn-controller-wrapper=*WRAPPER*
--ovn-user=*USER:GROUP*
--ovs-user=*USER:GROUP*
-h | --help

FILE LOCATION OPTIONS

--db-sock=*SOCKET*
--db-nb-file=*FILE*
--db-sb-file=*FILE*
--db-nb-schema=*FILE*
--db-sb-schema=*FILE*
--db-sb-create-insecure-remote=*yes|no*
--db-nb-create-insecure-remote=*yes|no*

```

--ovn-controller-ssl-key=KEY
--ovn-controller-ssl-cert=CERT
--ovn-controller-ssl-ca-cert=CERT
--ovn-controller-ssl-bootstrap-ca-cert=CERT

```

ADDRESS AND PORT OPTIONS

```

--db-nb-sync-from-addr=IP ADDRESS
--db-nb-sync-from-port=PORT NUMBER
--db-nb-sync-from-proto=PROTO
--db-sb-sync-from-addr=IP ADDRESS
--db-sb-sync-from-port=PORT NUMBER
--db-sb-sync-from-proto=PROTO
--ovn-northd-nb-db=PROTO:IP ADDRESS: PORT..
--ovn-northd-sb-db=PROTO:IP ADDRESS: PORT..

```

CLUSTERING OPTIONS

```

--db-nb-cluster-local-addr=IP ADDRESS
--db-nb-cluster-local-port=PORT NUMBER
--db-nb-cluster-local-proto=PROTO (tcp/ssl)
--db-nb-cluster-remote-addr=IP ADDRESS
--db-nb-cluster-remote-port=PORT NUMBER
--db-nb-cluster-remote-proto=PROTO (tcp/ssl)
--db-sb-cluster-local-addr=IP ADDRESS
--db-sb-cluster-local-port=PORT NUMBER
--db-sb-cluster-local-proto=PROTO (tcp/ssl)
--db-sb-cluster-remote-addr=IP ADDRESS
--db-sb-cluster-remote-port=PORT NUMBER
--db-sb-cluster-remote-proto=PROTO (tcp/ssl)

```

CONFIGURATION FILES

Following are the optional configuration files. If present, it should be located in the etc dir

ovnnb-active.conf

If present, this file should hold the url to connect to the active Northbound DB server

```
tcp:x.x.x.x:6641
```

ovnsb-active.conf

If present, this file should hold the url to connect to the active Southbound DB server

```
tcp:x.x.x.x:6642
```

ovn-northd-db-params.conf

If present, start_northd will not start the DB server even if **--ovn-manage-ovsdb=yes**. This file should hold the database url parameters to be passed to ovn-northd.

```
--ovnnb-db=tcp:x.x.x.x:6641 --ovnsb-db=tcp:x.x.x.x:6642
```

RUNNING OVN DB SERVERS WITHOUT DETACHING

```
# ovn-ctl run_nb_ovsdb
```

This command runs the OVN nb ovsdb-server without passing the **detach** option, making it to block until ovsdb-server exits. This command will be useful for starting the OVN nb ovsdb-server in a container.

```
# ovn-ctl run_sb_ovsdb
```

This command runs the OVN sb ovsdb-server without passing the **detach** option, making it to block until ovsdb-server exits. This command will be useful for starting the OVN sb ovsdb-server in a container.

EXAMPLE USAGE

Run ovn-controller on a host already running OVS

```
# ovn-ctl start_controller
```

Run ovn-northd on a host already running OVS

```
# ovn-ctl start_northd
```

All-in-one OVS+OVN for testing

```
# ovs-ctl start --system-id="random"
```

```
# ovn-ctl start_northd
```

```
# ovn-ctl start_controller
```

Promote and demote ovsdb servers

```
# ovn-ctl promote_ovnnb
```

```
# ovn-ctl promote_ovnsb
```

```
# ovn-ctl --db-nb-sync-from-addr=x.x.x.x --db-nb-sync-from-port=6641 demote_ovnnb
```

```
# ovn-ctl --db-sb-sync-from-addr=x.x.x.x --db-sb-sync-from-port=6642 demote_ovnsb
```

Creating a clustered db on 3 nodes with IPs x.x.x.x, y.y.y.y and z.z.z.z

Starting OVN ovsdb servers and ovn-northd on the node with IP x.x.x.x

```
# ovn-ctl --db-nb-addr=x.x.x.x --db-nb-create-insecure-remote=yes --db-sb-addr=x.x.x.x
--db-sb-create-insecure-remote=yes --db-nb-cluster-local-addr=x.x.x.x --db-sb-cluster-lo-
cal-addr=x.x.x.x --ovn-northd-nb-db=tcp:x.x.x.x:6641,tcp:y.y.y.y:6641,tcp:z.z.z.z:6641
--ovn-northd-sb-db=tcp:x.x.x.x:6642,tcp:y.y.y.y:6642,tcp:z.z.z.z:6642 start_northd
```

Starting OVN ovsdb-servers and ovn-northd on the node with IP y.y.y.y and joining the cluster started at x.x.x.x

```
# ovn-ctl --db-nb-addr=y.y.y.y --db-nb-create-insecure-remote=yes --db-sb-addr=y.y.y.y
--db-sb-create-insecure-remote=yes --db-nb-cluster-local-addr=y.y.y.y --db-sb-cluster-lo-
cal-addr=y.y.y.y --db-nb-cluster-remote-addr=x.x.x.x --db-sb-cluster-remote-addr=x.x.x.x
--ovn-northd-nb-db=tcp:x.x.x.x:6641,tcp:y.y.y.y:6641,tcp:z.z.z.z:6641
--ovn-northd-sb-db=tcp:x.x.x.x:6642,tcp:y.y.y.y:6642,tcp:z.z.z.z:6642 start_northd
```

Starting OVN ovsdb-servers and ovn-northd on the node with IP z.z.z.z and joining the cluster started at x.x.x.x

```
# ovn-ctl --db-nb-addr=z.z.z.z --db-nb-create-insecure-remote=yes --db-nb-cluster-lo-
cal-addr=z.z.z.z --db-sb-addr=z.z.z.z --db-sb-create-insecure-remote=yes --db-sb-cluster-lo-
cal-addr=z.z.z.z --db-nb-cluster-remote-addr=x.x.x.x --db-sb-cluster-remote-addr=x.x.x.x
--ovn-northd-nb-db=tcp:x.x.x.x:6641,tcp:y.y.y.y:6641,tcp:z.z.z.z:6641
--ovn-northd-sb-db=tcp:x.x.x.x:6642,tcp:y.y.y.y:6642,tcp:z.z.z.z:6642 start_northd
```

Passing ssl keys when starting OVN dbs will supercede the default ssl values in db

Starting standalone ovn db server passing SSL certificates

```
# ovn-ctl --ovn-nb-db-ssl-key=/etc/openvswitch/ovnnb-privkey.pem
--ovn-nb-db-ssl-cert=/etc/openvswitch/ovnnb-cert.pem --ovn-nb-db-ssl-ca-cert=/etc/open-
vswitch/cacert.pem --ovn-sb-db-ssl-key=/etc/openvswitch/ovnsb-privkey.pem
--ovn-sb-db-ssl-cert=/etc/openvswitch/ovnsb-cert.pem --ovn-sb-db-ssl-ca-cert=/etc/open-
vswitch/cacert.pem start_northd
```