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
start_ic
stop_northd
stop_controller
stop_controller_vtep
stop_ic
restart_northd
restart_controller
restart_controller_vtep
restart_ic
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
promote_ic_nb
promote_ic_sb
demote_ic_nb
demote_ic_sb
status_ic_nb
status_ic_sb
start_ic_ovsdb
start_ic_nb_ovsdb
start_ic_sb_ovsdb
stop_ic_ovsdb
stop_ic_nb_ovsdb
stop_ic_sb_ovsdb
restart_ic_ovsdb
run_ic_nb_ovsdb
run_ic_sb_ovsdb

OPTIONS

−−ovn−northd−priority=*NICE*

--ovn-northd-wrapper=*WRAPPER*

--ovn-controller-priority=*NICE*

--ovn-controller-wrapper=*WRAPPER*

--ovn-ic-priority=*NICE*

--ovn-ic-wrapper=*WRAPPER*

--ovsdb-nb-wrapper=*WRAPPER*

--ovsdb-sb-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*

--db-ic-nb-file=*FILE*

--db-ic-sb-file=*FILE*

--db-ic-nb-schema=*FILE*

--db-ic-sb-schema=*FILE*

--db-ic-sb-create-insecure-remote=*yes*|*no*

--db-ic-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*

--db-ic-nb-sync-from-addr=*IP ADDRESS*

--db-ic-nb-sync-from-port=*PORT NUMBER*

--db-ic-nb-sync-from-proto=*PROTO*

--db-ic-sb-sync-from-addr=*IP ADDRESS*

--db-ic-sb-sync-from-port=*PORT NUMBER*

--db-ic-sb-sync-from-proto=*PROTO*

--ovn-northd-nb-db=*PROTO*:*IP ADDRESS*: *PORT*..

--ovn-northd-sb-db=*PROTO*:*IP ADDRESS*: *PORT*..

--ovn-ic-nb-db=*PROTO*:*IP ADDRESS*: *PORT*..

--ovn-ic-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)*

--db-ic-nb-cluster-local-addr=*IP ADDRESS*

--db-ic-nb-cluster-local-port=*PORT NUMBER*

--db-ic-nb-cluster-local-proto=*PROTO (tcp/ssl)*

--db-ic-nb-cluster-remote-addr=*IP ADDRESS*

--db-ic-nb-cluster-remote-port=*PORT NUMBER*

--db-ic-nb-cluster-remote-proto=*PROTO (tcp/ssl)*

--db-ic-sb-cluster-local-addr=*IP ADDRESS*

--db-ic-sb-cluster-local-port=*PORT NUMBER*

--db-ic-sb-cluster-local-proto=*PROTO (tcp/ssl)*

--db-ic-sb-cluster-remote-addr=*IP ADDRESS*

--db-ic-sb-cluster-remote-port=*PORT NUMBER*

--db-ic-sb-cluster-remote-proto=*PROTO (tcp/ssl)*

PROBE INTERVAL OPTIONS

--db-nb-probe-interval-to-active=*Time in milliseconds*

--db-sb-probe-interval-to-active=*Time in milliseconds*

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

ic−nb−active.conf
If present, this file should hold the url to connect to the active Interconnection Northbound DB server

tcp:x.x.x.x:6645

ic−sb−active.conf
If present, this file should hold the url to connect to the active Interconnection Southbound DB server

tcp:x.x.x.x:6646

ovn−ic−db−params.conf
If present, this file should hold the database url parameters to be passed to ovn-ic.

−−ic−nb−db=tcp:x.x.x.x:6645 −−ic−sb−db=tcp:x.x.x.x:6646

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.

 # ovn−ctl run_ic_nb_ovsdb

This command runs the OVN IC-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 IC-NB ovsdb-server in a container.

 # ovn−ctl run_ic_sb_ovsdb

This command runs the OVN IC-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 IC-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 −−db−nb−probe−interval−to−active=60000 demote_ovnnb

 # ovn−ctl −−db−sb−sync−from−addr=x.x.x.x −−db−sb−sync−from−port=6642

--db-sb-probe-interval-to-active=60000 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-local-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-local-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-local-addr=z.z.z.z --db-sb-addr=z.z.z.z --db-sb-create-insecure-remote=yes --db-sb-cluster-local-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/ovn/ovnnb-privkey.pem --ovn-nb-db-ssl-cert=/etc/ovn/ovnnb-cert.pem --ovn-nb-db-ssl-ca-cert=/etc/ovn/cacert.pem --ovn-sb-db-ssl-key=/etc/ovn/ovnsb-privkey.pem --ovn-sb-db-ssl-cert=/etc/ovn/ovnsb-cert.pem --ovn-sb-db-ssl-ca-cert=/etc/ovn/cacert.pem start_northd