NAME
> ovn-controller – Open Virtual Network local controller

SYNOPSIS
> **ovn−controller** [*options*] [*ovs-database*]

DESCRIPTION
> **ovn−controller** is the local controller daemon for OVN, the Open Virtual Network. It connects up to the OVN Southbound database (see **ovn−sb**(5)) over the OVSDB protocol, and down to the Open vSwitch database (see **ovs−vswitchd.conf.db**(5)) over the OVSDB protocol and to **ovs−vswitchd**(8) via OpenFlow. Each hypervisor and software gateway in an OVN deployment runs its own independent copy of **ovn−controller**; thus, **ovn−controller**'s downward connections are machine-local and do not run over a physical network.

CONFIGURATION
> **ovn−controller** retrieves most of its configuration information from the local Open vSwitch's ovsdb-server instance. The default is the **db.sock** in local Open vSwitch's "run" directory. *ovs-database* must take one of the following forms:

> - **ssl:***ip***:***port*
>
>   The specified SSL *port* on the host at the given *ip*, which must be expressed as an IP address (not a DNS name) in IPv4 or IPv6 address format. If *ip* is an IPv6 address, then wrap *ip* with square brackets, e.g.: **ssl:[::1]:6640**. The **−−private−key**, **−−certificate**, and **−−ca−cert** options are mandatory when this form is used.

> - **tcp:***ip***:***port*
>
>   Connect to the given TCP *port* on *ip*, where *ip* can be IPv4 or IPv6 address. If *ip* is an IPv6 address, then wrap *ip* with square brackets, e.g.: **tcp:[::1]:6640**.

> - **unix:***file*
>
>   On POSIX, connect to the Unix domain server socket named *file*.
>
>   On Windows, connect to a localhost TCP port whose value is written in *file*.

> **ovn−controller** assumes it gets configuration information from the following keys in the **Open_vSwitch** table of the local OVS instance:

> - **external_ids:system−id** specifies the chassis name to use in the Chassis table.

> - **external_ids:ovn−bridge** specifies the integration bridge to which logical ports are attached. The default is **br−int**.

> - **external_ids:ovn−remote** specifies the OVN database that this system should connect to for its configuration.

> - **external_ids:ovn−encap−type** specifies the encapsulation type that a chassis should use to connect to this node. Supported tunnel types for connecting hypervisors are **geneve** and **stt**. Gateways may use **geneve**, **vxlan**, or **stt**.

> - **external_ids:ovn−encap−ip** specifies the IP address that a chassis should use to connect to this node using encapsulation type specified by **external_ids:ovn−encap−ip**.

> Currently, **ovn−controller** does not support changing the chassis name, integration bridge, or OVN database mid-run. If these values need to change, the daemon must be restarted. This behavior should be changed.

RUNTIME MANAGEMENT COMMANDS
> **ovs−appctl** can send commands to a running **ovn−controller** process. The currently supported commands are described below.

> > **exit**   Causes **ovn−controller** to gracefully terminate.

ct−zone−list
> Lists each local logical port and its connection tracking zone.