

**NAME**

ovsdb-tool – Open vSwitch database management utility

**SYNOPSIS**

```
ovsdb-tool [options] create [db [schema]]
ovsdb-tool [options] compact [db [target]]
ovsdb-tool [options] convert [db [schema [target]]]
ovsdb-tool [options] needs-conversion [db [schema]]
ovsdb-tool [options] db-version [db]
ovsdb-tool [options] schema-version [schema]
ovsdb-tool [options] db-cksum [db]
ovsdb-tool [options] schema-cksum [schema]
ovsdb-tool [options] query [db] transaction
ovsdb-tool [options] transact [db] transaction
ovsdb-tool [options] [-m | --more]... show-log [db]
ovsdb-tool help
```

Logging options:

```
[-v[module[:facility[:level]]]]...
[--verbose[=module[:facility[:level]]]]...
[--log-file[=file]]
```

Common options:

```
[-h | --help] [-V | --version]
```

**DESCRIPTION**

The **ovsdb-tool** program is a command-line tool for managing Open vSwitch database (OVSDB) files. It does not interact directly with running Open vSwitch database servers (instead, use **ovsdb-client**).

**Basic Commands****create** *db schema*

Reads an OVSDB schema from the file named *schema* and creates a new OVSDB database file named *db* using that schema. The new database is initially empty. This command will not overwrite an existing *db*.

*schema* must contain an OVSDB schema in JSON format. Refer to the OVSDB specification for details.

**compact** *db [target]*

Reads *db* and writes a compacted version. If *target* is specified, the compacted version is written as a new file named *target*, which must not already exist. If *target* is omitted, then the compacted version of the database replaces *db* in-place.

**convert** *db schema [target]*

Reads *db*, translating it into to the schema specified in *schema*, and writes out the new interpretation. If *target* is specified, the translated version is written as a new file named *target*, which must not already exist. If *target* is omitted, then the translated version of the database replaces *db* in-place.

This command can do simple “upgrades” and “downgrades” on a database’s schema. The data in *db* must be valid when interpreted under *schema*, with only one exception: data in *db* for tables and columns that do not exist in *schema* are ignored. Columns that exist in *schema* but not in *db* are set to their default values. All of *schema*’s constraints apply in full.

**needs-conversion** *db schema*

Reads the schema embedded in *db* and the standalone schema in *schema* and compares them. If the schemas are the same, prints **no** on stdout; if they differ, print **yes**.

**db-version** *db***schema-version** *schema*

Prints the version number in the schema embedded within the database *db* or in the standalone schema *schema* on stdout. A schema version number has the form *x.y.z*. See **ovs-vswitchd.conf.db(5)** for details.

Schema version numbers and Open vSwitch version numbers are independent.

If *schema* or *db* was created before schema versioning was introduced, then it will not have a version number and this command will print a blank line.

**db-cksum** *db***schema-cksum** *schema*

Prints the checksum in the schema embedded within the database *db* or of the standalone schema *schema* on stdout.

If *schema* or *db* was created before schema checksums were introduced, then it will not have a checksum and this command will print a blank line.

**query** *db transaction*

Opens *db*, executes *transaction* on it, and prints the results. The *transaction* must be a JSON array in the format of the **params** array for the JSON-RPC **transact** method, as described in the OVSDb specification.

The *db* is opened for read-only access, so this command may safely run concurrently with other database activity, including **ovsdb-server** and other database writers. The *transaction* may specify database modifications, but these will have no effect on *db*.

**transact** *db transaction*

Opens *db*, executes *transaction* on it, prints the results, and commits any changes to *db*. The *transaction* must be a JSON array in the format of the **params** array for the JSON-RPC **transact** method, as described in the OVSDb specification.

The *db* is opened and locked for read/write access, so this command will fail if the database is opened for writing by any other process, including **ovsdb-server(1)**. Use **ovsdb-client(1)**, instead, to write to a database that is served by **ovsdb-server(1)**.

**show-log** *db*

Prints a summary of the records in *db*'s log, including the time and date at which each database change occurred and any associated comment. This may be useful for debugging.

To increase the verbosity of output, add **-m** (or **--more**) one or more times to the command line. With one **-m**, **show-log** prints a summary of the records added, deleted, or modified by each transaction. With two **-ms**, **show-log** also prints the values of the columns modified by each change to a record.

**OPTIONS****Logging Options**

**-v**[*spec*]

**--verbose**=*[spec]*

Sets logging levels. Without any *spec*, sets the log level for every module and facility to **dbg**. Otherwise, *spec* is a list of words separated by spaces or commas or colons, up to one from each category below:

- A valid module name, as displayed by the **vlog/list** command on **ovs-appctl(8)**, limits the log level change to the specified module.
- **syslog**, **console**, or **file**, to limit the log level change to only to the system log, to the console, or to a file, respectively.

On Windows platform, **syslog** is accepted as a word and is only useful along with the **--syslog-target** option (the word has no effect otherwise).

- **off**, **emer**, **err**, **warn**, **info**, or **dbg**, to control the log level. Messages of the given severity or higher will be logged, and messages of lower severity will be filtered out. **off** filters out all messages. See **ovs-appctl**(8) for a definition of each log level.

Case is not significant within *spec*.

Regardless of the log levels set for **file**, logging to a file will not take place unless **--log-file** is also specified (see below).

For compatibility with older versions of OVS, **any** is accepted as a word but has no effect.

**-v**

**--verbose**

Sets the maximum logging verbosity level, equivalent to **--verbose=dbg**.

**-vPATTERN:facility:pattern**

**--verbose=PATTERN:facility:pattern**

Sets the log pattern for *facility* to *pattern*. Refer to **ovs-appctl**(8) for a description of the valid syntax for *pattern*.

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

Enables logging to a file. If *file* is specified, then it is used as the exact name for the log file. The default log file name used if *file* is omitted is **/var/log/openvswitch/ovsdb-tool.log**.

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

Send syslog messages to UDP *port* on *host*, in addition to the system syslog. The *host* must be a numerical IP address, not a hostname.

#### Other Options

**-h**

**--help** Prints a brief help message to the console.

**-V**

**--version**

Prints version information to the console.

#### FILES

The default *db* is **/usr/etc/openvswitch/conf.db**. The default *schema* is **/usr/share/openvswitch/vswitch.ovsschema**. The **help** command also displays these defaults.

#### SEE ALSO

**ovsdb-server**(1), **ovsdb-client**(1), and the OVSDb specification.