

NAME

ovsdb-server – _Server database schema

Every **ovsdb-server** (version 2.9 or later) always hosts an instance of this schema, which holds information on the status and configuration of the server itself. This database is read-only. This manpage describes the schema for this database.

TABLE SUMMARY

The following list summarizes the purpose of each of the tables in the **_Server** database. Each table is described in more detail on a later page.

| Table | Purpose |
|-----------------|------------|
| Database | Databases. |

Database TABLE

This table describes the databases hosted by the database server, with one row per database. As its database configuration and status changes, the server automatically and immediately updates the table to match.

The OVSDb protocol specified in RFC 7047 does not provide a way for an OVSDb client to find out about some kinds of configuration changes, such as about databases added or removed while a client is connected to the server, or databases changing between read/write and read-only due to a transition between active and backup roles. This table provides a solution: clients can monitor the table's contents to find out about important changes.

Traditionally, **ovsdb-server** disconnects all of its clients when a significant configuration change occurs, because this prompts a well-written client to reassess what is available from the server when it reconnects. Because this table provides an alternative and more efficient way to find out about those changes, OVS 2.9 also introduces the **set_db_change_aware** RPC, documented in **ovsdb-server(7)**, to allow clients to suppress this disconnection behavior.

When a database is removed from the server, in addition to **Database** table updates, the server sends **canceled** messages, as described in RFC 7047 section 4.1.4, in reply to outstanding transactions for the removed database. The server also cancels any outstanding monitoring initiated by **monitor** or **monitor_cond** requested on the removed database, sending the **monitor_canceled** RPC described in **ovsdb-server(7)**. Only clients that disable disconnection with **set_db_change_aware** receive these messages.

Clients can use the **_uuid** column in this table as a generation number. The server generates a fresh **_uuid** every time it adds a database, so that removing and then re-adding a database to the server causes its row **_uuid** to change.

Summary:

| | |
|---------------|--|
| name | string |
| model | string, either clustered or standalone |
| schema | optional string |

Clustered Databases:

| | |
|------------------|------------------|
| connected | boolean |
| leader | boolean |
| cid | optional uuid |
| sid | optional uuid |
| index | optional integer |

Details:

name: string

The database's name, as specified in its schema.

model: string, either **clustered** or **standalone**

The storage model: **standalone** for a standalone or active-backup database, **clustered** for a clustered database.

schema: optional string

The database schema, as a JSON string. In the case of a clustered database, this is empty until it finishes joining its cluster.

Clustered Databases:

These columns are most interesting and in some cases only relevant for clustered databases, that is, those where the **model** column is **clustered**.

connected: boolean

True if the database is connected to its storage. A standalone or active-backup database is always connected. A clustered database is connected if the server is in contact with a majority of its cluster. An unconnected database cannot be modified and its data might be unavailable or stale.

leader: boolean

True if the database is the leader in its cluster. For a standalone or active-backup database, this is always true.

cid: optional uuid

The cluster ID for this database, which is the same for all of the servers that host this particular clustered database. For a standalone or active-backup database, this is empty.

sid: optional uuid

The server ID for this database, different for each server that hosts a particular clustered database. A server that hosts more than one clustered database will have a different **sid** in each one. For a standalone or active-backup database, this is empty.

index: optional integer

For a clustered database, the index of the log entry currently exposed to clients. For a given server, this increases monotonically. When a client switches from one server to another in a cluster, it can ensure that it never sees an older snapshot of data by avoiding servers that have **index** less than the largest value they have already observed.

For a standalone or active-backup database, this is empty.