Database structure

# Database structure#

This page describes the purpose of each table in the n8n database.

## Database and query technology#

By default, n8n uses SQLite as the database. If you are using another database the structure will be similar, but the data-types may be different depending on the database.

n8n uses TypeORM for queries and migrations.

To inspect the n8n database, you can use DBeaver, which is an open-source universal database tool.

## Tables#

These are the tables n8n creates during setup.

### auth\_identity#

Stores details of external authentication providers when using SAML.

### auth\_provider\_sync\_history#

Stores the history of a SAML connection.

### credentials\_entity#

Stores the credentials used to authenticate with integrations.

### event\_destinations#

Contains the destination configurations for Log streaming.

### execution\_data#

Contains the workflow at time of running, and the execution data.

### execution\_entity#

Stores all saved workflow executions. Workflow settings can affect which executions n8n saves.

### execution\_metadata#

Stores Custom executions data.

### installed\_nodes#

Lists the community nodes installed in your n8n instance.

### installed\_packages#

Details of npm community nodes packages installed in your n8n instance. installed\_nodes lists each individual node. installed\_packages lists npm packages, which may contain more than one node.

installed\_packages

### migrations#

A log of all database migrations. Read more about Migrations in TypeORM's documentation.

### project#

Lists the projects in your instance.

### project\_relation#

Describes the relationship between a user and a project, including the user's role type.

### role#

Not currently used. Foruse in future work on custom roles.

### settings#

Records custom instance settings. These are settings that you can't control using environment variables. They include:

• Whether the instance owner is set up

• Whether the user chose to skip owner and user management setup

• License key

### shared\_credentials#

Maps credentials to users.

### shared\_workflow#

Maps workflows to users.

### tag\_entity#

All workflow tags created in the n8n instance. This table lists the tags. workflows\_tags records which workflows have which tags.

### user#

Contains user data.

### variables#

Store variables.

### webhook\_entity#

Records the active webhooks in your n8n instance's workflows. This isn't just webhooks uses in the Webhook node. It includes all active webhooks used by any trigger node.

### workflow\_entity#

Your n8n instance's saved workflows.

### workflow\_history#

Store previous versions of workflows.

### workflow\_statistics#

Counts workflow IDs and their status.

### workflows\_tags#

Maps tags to workflows. tag\_entity contains tag details.

## Entity Relationship Diagram (ERD)#