

# Managed Databases

A managed database is any database after the REF database in the release pipeline. The REF database is always first in the pipeline.

## Managed Database Setup

Before you create a Datical project and steps, the following database setup is needed. Set up each database in the release pipeline.

- Configure users, roles, and permissions.
- Configure database-specific facilities (such as Oracle Auto-Permissions and Auto-Synonyms, or enabling Integrated Security connections on SQL Server).

See the sections for each database platform for details.

## Database Information to Use When Creating Projects

When you create a project and steps, you do the following:

- Configure connection information (URL and port). You need the database information.
- Configure credentials (user name and password) and credential options. You need the username and password you created in the database. Datical DB obtains connection user/password information from one of these two methods below. **We strongly recommend to use the first method (runtime credentials) because it is more secure.** The second option (storing credentials in the datical.project file) is to be avoided because of the possibility of the encoded passwords being decoded. Credential options include:
  - Option 1: Runtime credentials (more secure)
    - Prompt during project operations
    - Store in environment variables
  - Option 2: Store in the datical.project file (less secure)
    - Passwords are encoded
- Configure connection settings (some are unique to a database type/platform)