

# Creating and Configuring a SQL Server User in SSMS

## Step-by-Step Guide to Create a User, Grant Permissions, and Set Up Connections Using SSMS

### 1. Create a New SQL Server Login

- a. Open SQL Server Management Studio (SSMS).
- b. Connect to your SQL Server instance.
- c. Expand the Security folder in Object Explorer.
- d. Right-click on Logins and select New Login.
- e. In the Login - New window:
  - Login name: Enter a name for the new SQL Server login (e.g., new\_user).
  - Authentication:
    - \* For SQL Server Authentication:
      - Select SQL Server authentication.
      - Enter a password for the new user.
      - Optional: Uncheck Enforce password policy.
    - \* For Windows Authentication:
      - Select Windows authentication.
      - Click the search icon to find a user in your domain.
  - Default database: Select a database the user should connect to by default.

### f. Assign Server Roles:

- Click on Server Roles in the left pane.
- Check the appropriate server roles for this user (e.g., sysadmin, public, dbcreator).

### g. User Mapping:

- Click on User Mapping in the left pane.
- Check the databases for user access.

- Assign database roles (e.g., db\_datareader, db\_datawriter, db\_owner).

h. Click OK to create the user.

## 2. Grant Permissions to the User

a. Use SSMS or run SQL commands to grant specific permissions.

b. Example SQL Commands:

```
USE YourDatabaseName;
```

```
GO
```

```
-- Grant SELECT permission on a specific table
```

```
GRANT SELECT ON dbo.YourTableName TO new_user;
```

```
-- Grant INSERT permission on a specific table
```

```
GRANT INSERT ON dbo.YourTable TO new_user;
```

```
-- Grant EXECUTE permission on a stored procedure
```

```
GRANT EXECUTE ON dbo.YourStoredProcedure TO new_user;
```

```
-- Grant full database ownership
```

```
EXEC sp_addrolemember 'db_owner', 'new_user';
```

## 3. Configure SSMS to Use SQL Server Authentication

a. Open SSMS and connect to your SQL Server instance.

b. In the "Connect to Server" window:

- Server type: Choose Database Engine.

- Server name: Enter your server name.

- Authentication: Select SQL Server Authentication.

- Enter the Login and Password you created earlier.

- Click Connect.

#### 4. Configure SSMS to Use Windows Authentication

- a. Open SSMS and connect to your SQL Server instance.
- b. In the "Connect to Server" window:
  - Server type: Choose Database Engine.
  - Server name: Enter your server name.
  - Authentication: Select Windows Authentication.
  - Click Connect.

#### 5. Test the Connection

- a. Log out of SSMS.
- b. Log in using the new credentials (SQL Server or Windows Authentication).
- c. Test access to databases and objects with granted permissions.