

CURSO SISTEMAS DE GESTION DE LA INFORMACION



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INSTALAR SERVIDOR MYSQL

VERSIÓN MYSQL 8

<https://dev.mysql.com/downloads/mysql/>

MySQL Community Server 8.0.21

Select Operating System:

Microsoft Windows

[Looking for previous GA versions?](#)

Recommended Download:

MySQL Installer for Windows


**All MySQL Products. For All Windows Platforms.
In One Package.**

Starting with MySQL 5.6 the MySQL Installer package replaces the standalone MSI packages.

Windows (x86, 32 & 64-bit), MySQL Installer MSI



Go to Download Page >

General Availability (GA) Releases Archives 

MySQL Installer 8.0.21

Select Operating System:

Microsoft Windows ▼

[Looking for previous GA versions?](#)

Windows (x86, 32-bit), MSI Installer (mysql-installer-web-community-8.0.21.0.msi)	8.0.21	24.5M	Download
		MD5: cf2b46ba35a4443f41fb8e94a0e91d93	Signature

Login Now or Sign Up for a free account.

An Oracle Web Account provides you with the following advantages:

- Fast access to MySQL software downloads
- Download technical White Papers and Presentations
- Post messages in the MySQL Discussion Forums
- Report and track bugs in the MySQL bug system

Login »

using my Oracle Web account

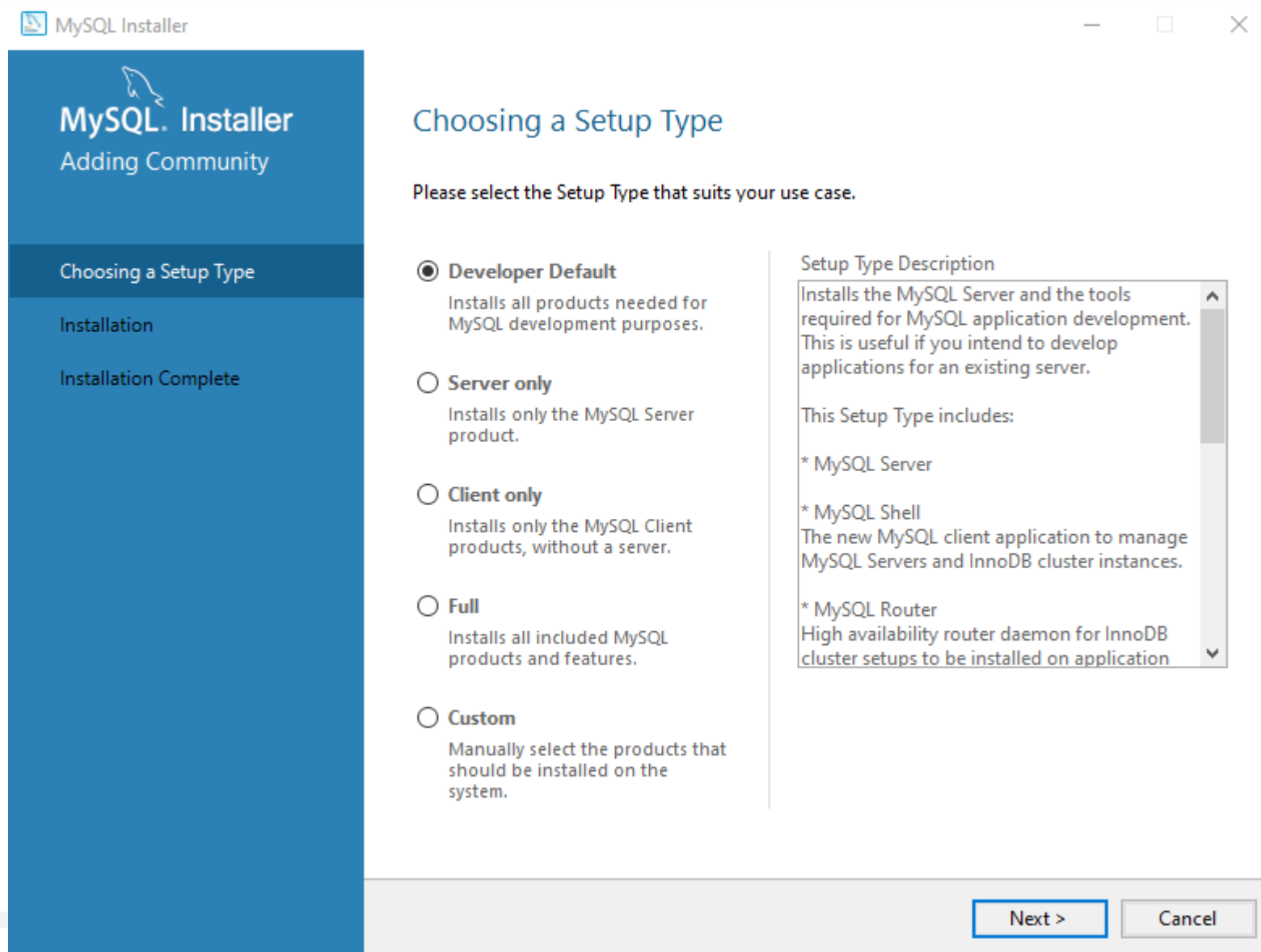
Sign Up »

for an Oracle Web account

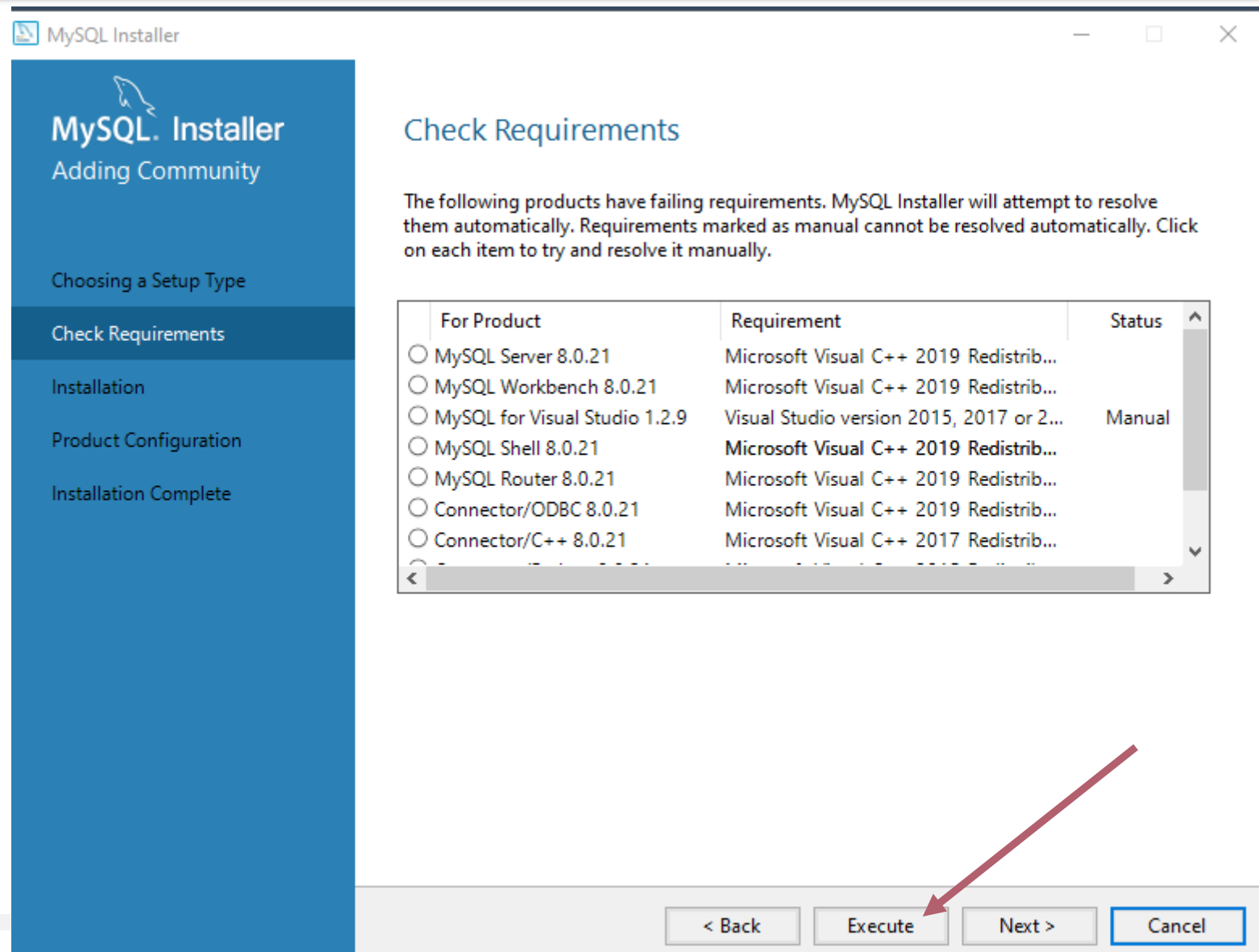
MySQL.com is using Oracle SSO for authentication. If you already have an Oracle Web account, click the Login link. Otherwise, you can signup for a free account by clicking the Sign Up link and following the instructions.

[No thanks, just start my download.](#)

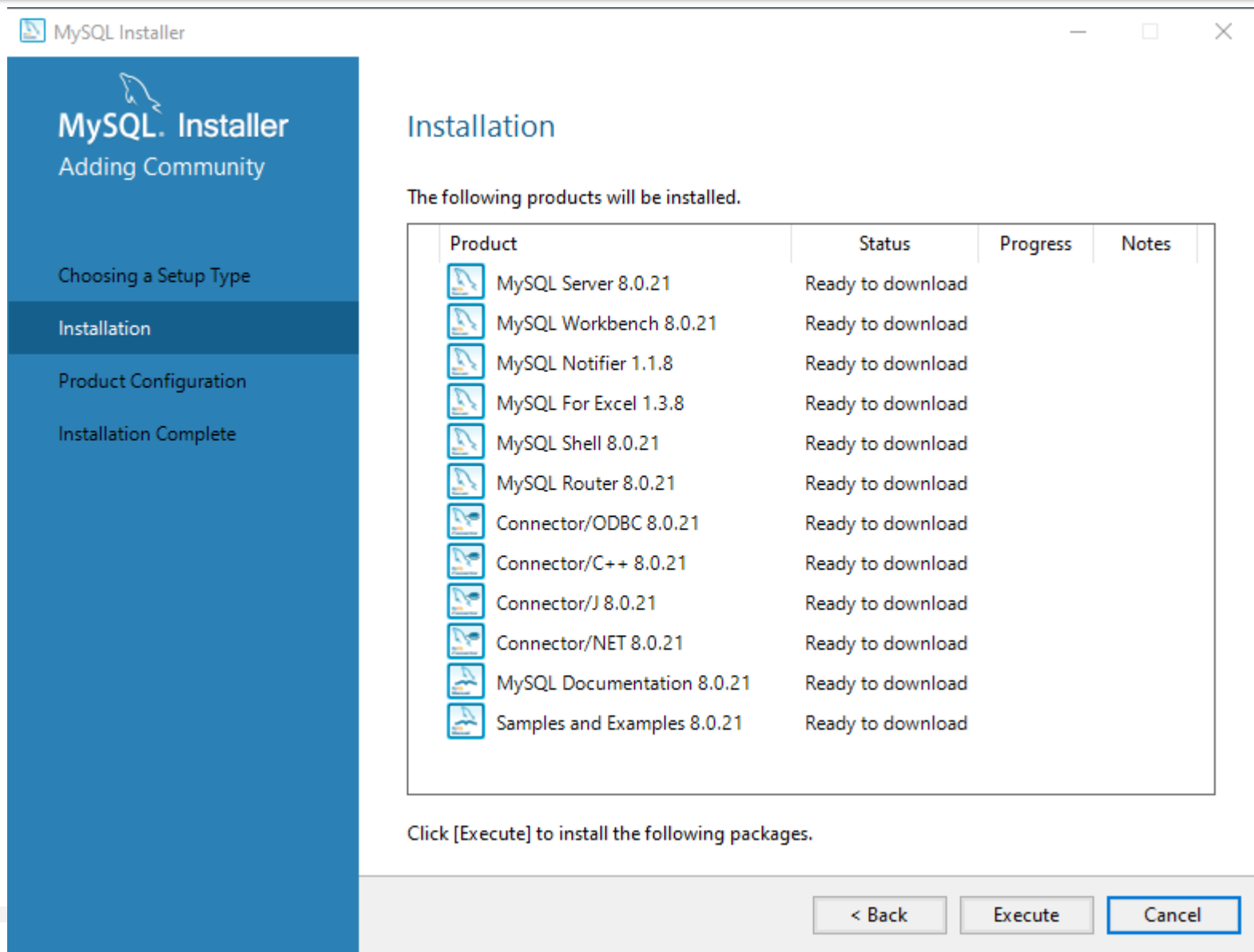




INSTALAMOS TODO LO SELECCIONADO



CONTINUAMOS CON LA INSTALACION



CONTINUAMOS CON LA INSTALACIÓN

MySQL Installer

MySQL. Installer
Adding Community

Choosing a Setup Type

Installation

Product Configuration

Installation Complete

Installation

The following products will be installed.

	Product	Status	Progress	Notes
✓	MySQL Server 8.0.21	Complete		
✓	MySQL Workbench 8.0.21	Complete		
✓	MySQL Notifier 1.1.8	Complete		
✓	MySQL For Excel 1.3.8	Complete		
✓	MySQL Shell 8.0.21	Complete		
✓	MySQL Router 8.0.21	Complete		
✓	Connector/ODBC 8.0.21	Complete		
✓	Connector/C++ 8.0.21	Complete		
✓	Connector/J 8.0.21	Complete		
✓	Connector/NET 8.0.21	Complete		
✓	MySQL Documentation 8.0.21	Complete		
✓	Samples and Examples 8.0.21	Complete		

Show Details >

< Back Next > Cancel

CONFIGURACIONES DEL SERVIDOR 8

MySQL Installer



MySQL
Installer

Product	Version	Architecture	Quick Action
MySQL Server	8.0.21	X64	Reconfigure

Type and Networking

Authentication Method

Accounts and Roles

Windows Service

Apply Configuration

Type and Networking

Server Configuration Type

Choose the correct server configuration type for this MySQL Server installation. This setting will define how much system resources are assigned to the MySQL Server instance.

Config Type:

Connectivity

Use the following controls to select how you would like to connect to this server.

☒ TCP/IP Port: X Protocol Port:

☒ Open Windows Firewall ports for network access

☐ Named Pipe Pipe Name:

☐ Shared Memory Memory Name:

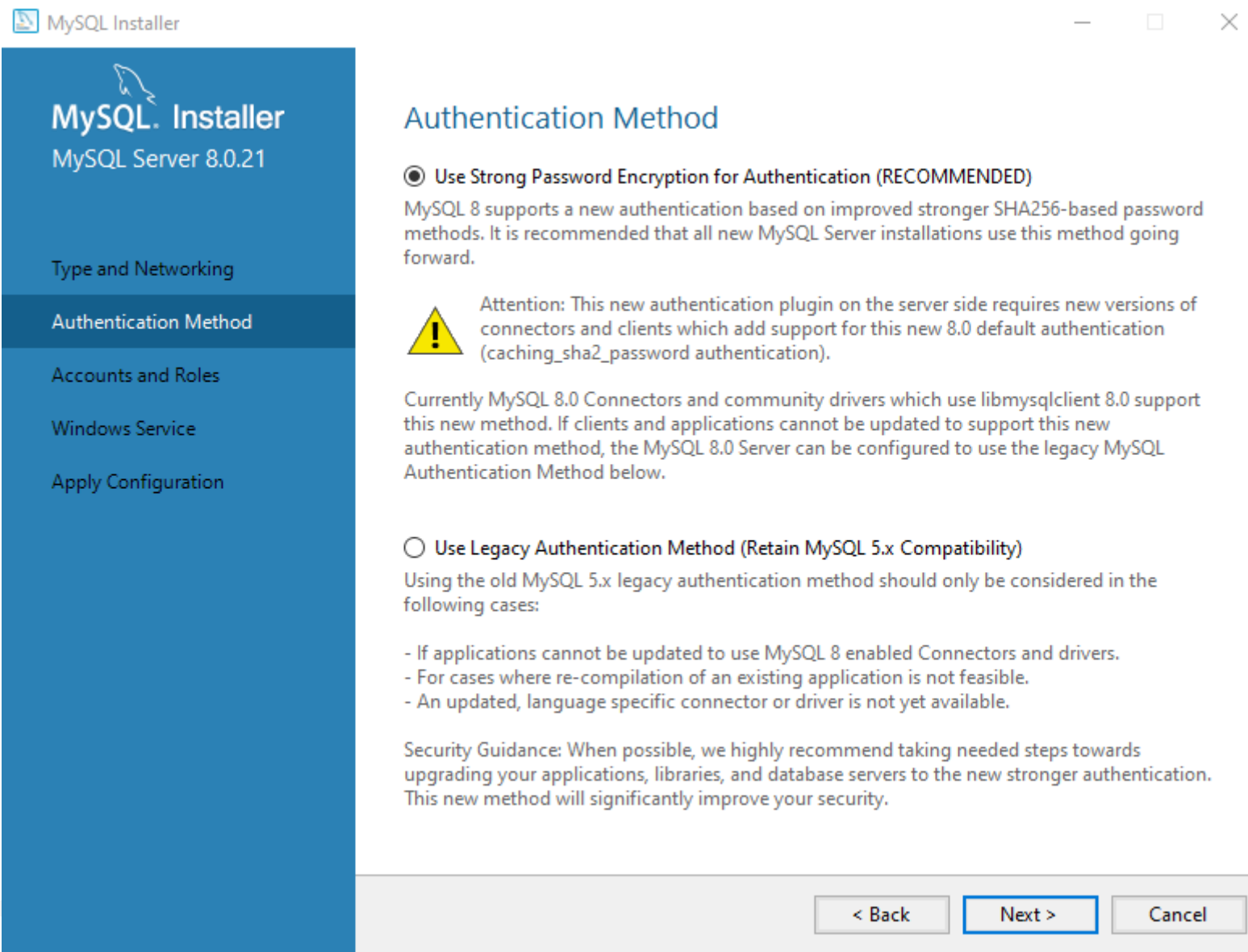
Advanced Configuration

Select the check box below to get additional configuration pages where you can set advanced and logging options for this server instance.

☐ Show Advanced and Logging Options

Next >

Cancel



CONFIGURACIÓN DE LOS USUARIOS

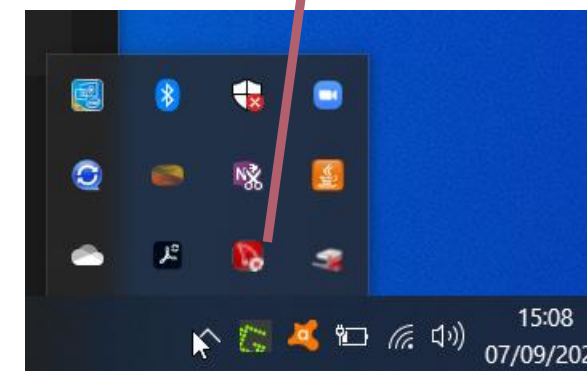
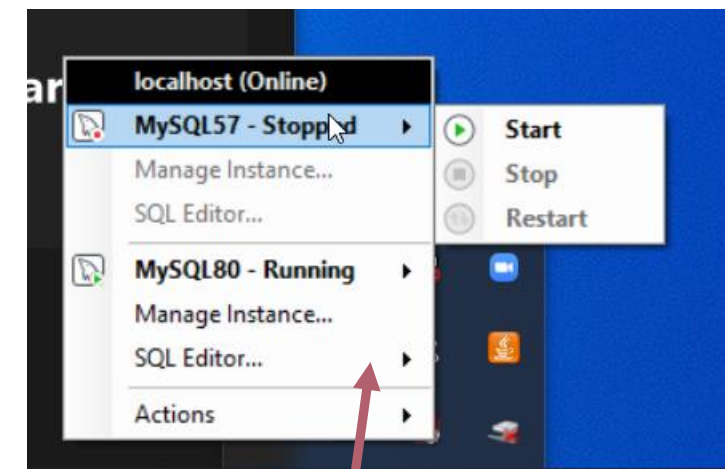
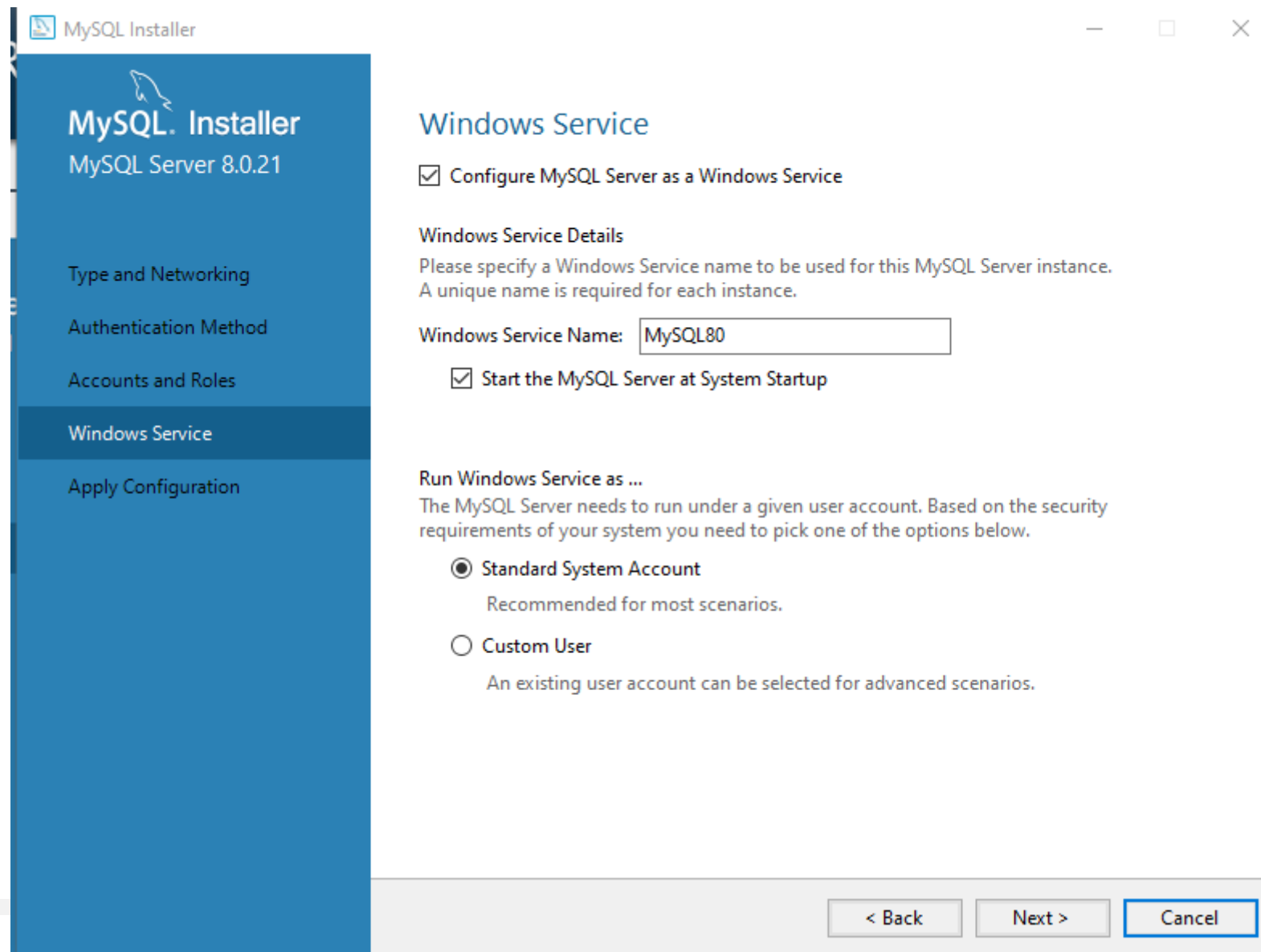
The image shows the MySQL Installer window for MySQL Server 8.0.21, specifically the 'Accounts and Roles' tab. The left sidebar contains navigation options: 'Type and Networking', 'Authentication Method', 'Accounts and Roles' (selected), 'Windows Service', and 'Apply Configuration'. The main area is titled 'Accounts and Roles' and contains two sections: 'Root Account Password' and 'MySQL User Accounts'.

Root Account Password: This section prompts the user to enter a password for the root account. It includes two input fields: 'MySQL Root Password' (marked with a red circle 1) and 'Repeat Password' (marked with a red circle 2). Below these fields, the password strength is indicated as 'Weak'.

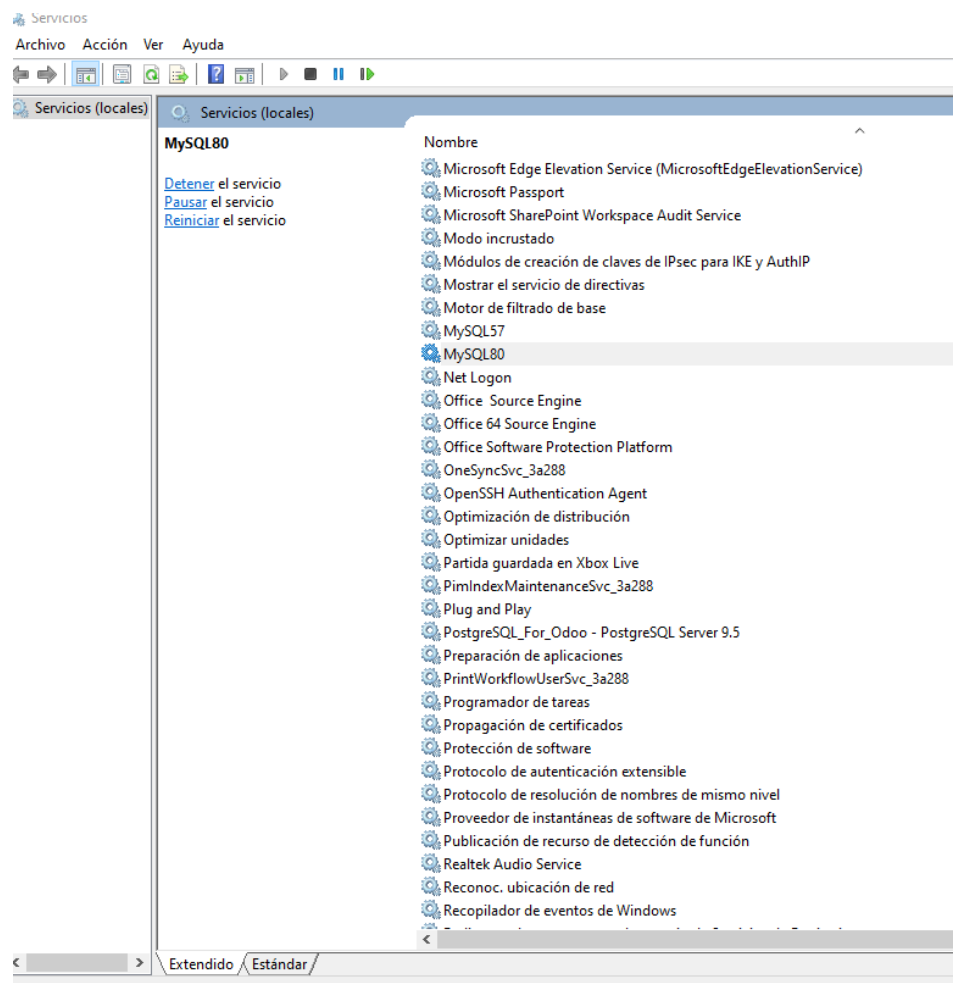
MySQL User Accounts: This section prompts the user to create MySQL user accounts. It includes a table with columns 'MySQL User Name', 'Host', and 'User Role'. To the right of the table are buttons for 'Add User' (marked with a red circle 3), 'Edit User', and 'Delete'. At the bottom of the main window are buttons for '< Back', 'Next >', and 'Cancel'.

MySQL User Account Modal: A modal dialog box is open, titled 'MySQL User Account'. It prompts the user to 'Please specify the user name, password, and database role.' The modal contains the following fields: 'User Name' (marked with a red circle 4) with the value 'alpe', 'Host' (set to '<All Hosts (%)>'), 'Role' (set to 'DB Admin'), 'Authentication' (set to 'MySQL'), and 'MySQL user credentials' section with 'Password' (marked with a red circle 5) and 'Confirm Password' (marked with a red circle 6) fields. The password strength is also indicated as 'Weak'. At the bottom of the modal are 'OK' and 'Cancel' buttons.

CONFIGURAR SERVICIO DE WINDOWS



SI NO TENEMOS EL NOTIFIER



MySQL Installer

MySQL. Installer
Samples and Examples

Connect To Server

Apply Configuration

Connect To Server

Select the MySQL server instances from the list to receive sample schemas and data.

	Server	Port	Arch...	Type	Status
<input checked="" type="checkbox"/>	MySQL Server 8.0.21	3306	X64	Stand-alone Server	Running

Provide the credentials that should be used (requires root privileges).
Click "Check" to ensure they work.

User name: Credentials provided in Server configuration

Password: 1

2

3

TERMINAMOS LA INSTALACION

MySQL Installer

MySQL. Installer
Adding Community

Choosing a Setup Type

Installation

Product Configuration

Installation Complete

Installation Complete

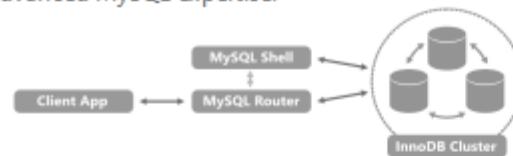
The installation procedure has been completed.

Copy Log to Clipboard

☒ Start MySQL Workbench after setup

☐ Start MySQL Shell after setup

The MySQL Shell is an advanced MySQL client application that can be used to work with single MySQL Server instances. Further, it can be used to create and manage an InnoDB cluster, an integrated solution for high availability and scalability of MySQL databases, without requiring advanced MySQL expertise.



Refer to the following links for documentation, tutorials and examples on MySQL Shell:

[MySQL Shell Documentation](#)

[Setting up a Real World Cluster Blog](#)

[The All New MySQL InnoDB ReplicaSet Blog](#)

[Changing Cluster Options Live Blog](#)

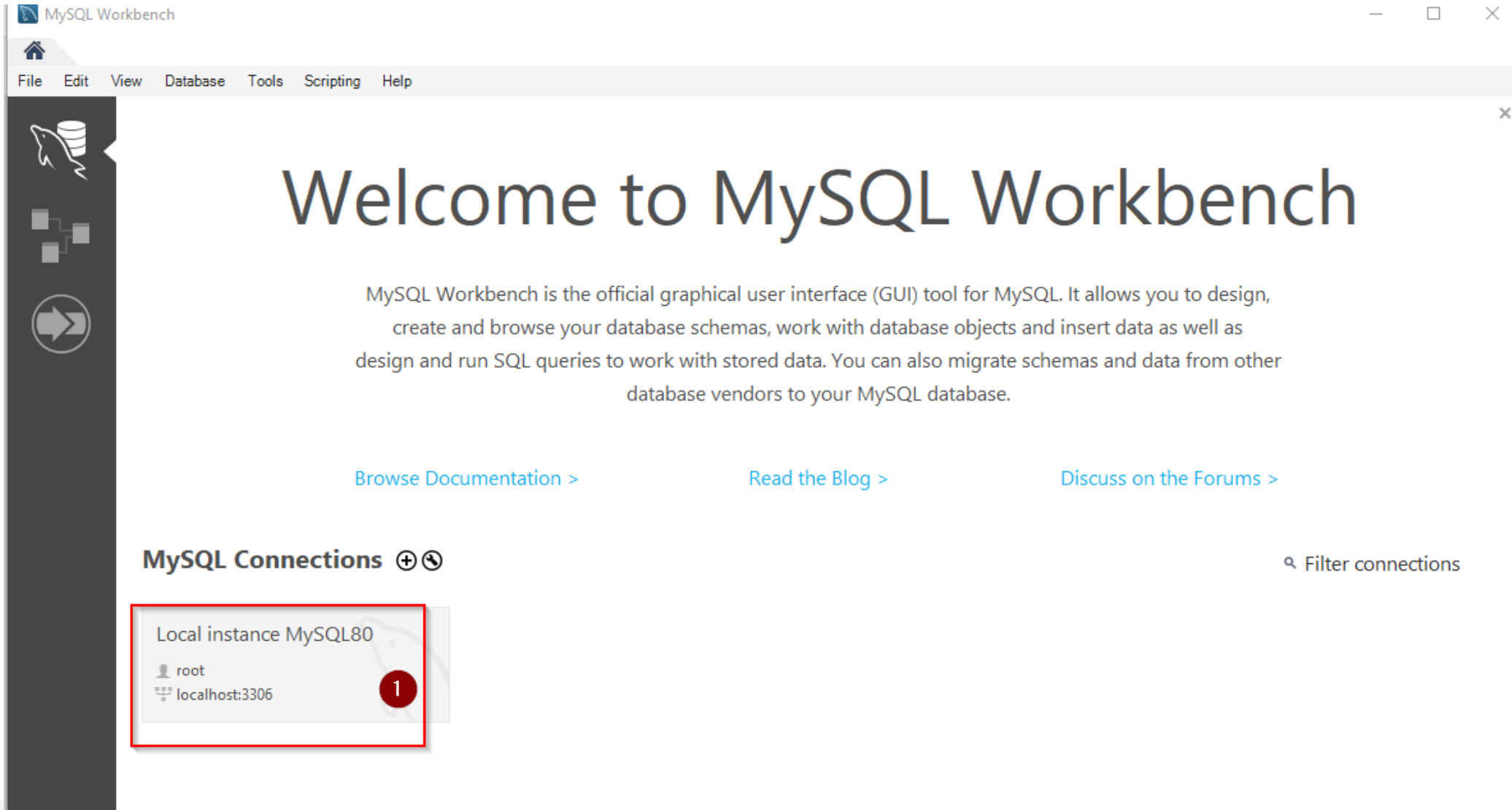
ARRANCAMOS EL CLIENTE
MYSQL

Finish

CLIENTE MYSQL

MYSQL WORKBENCH

PROBAR LA CONEXIÓN AL SERVIDOR INSTALADO



The screenshot shows the MySQL Workbench application window. The title bar reads 'MySQL Workbench'. The menu bar includes 'File', 'Edit', 'View', 'Database', 'Tools', 'Scripting', and 'Help'. The left sidebar contains icons for Home, Servers, Recent, and a right-pointing arrow. The main area displays a 'Welcome to MySQL Workbench' message, followed by a description of the tool's capabilities and three links: 'Browse Documentation >', 'Read the Blog >', and 'Discuss on the Forums >'. Below these links is the 'MySQL Connections' section, which includes a search icon and the text 'Filter connections'. A single connection is listed: 'Local instance MySQL80'. This connection entry is highlighted with a red rectangular box. Within this box, the username 'root' and the host 'localhost:3306' are visible. A red circle with the number '1' is positioned to the right of the connection entry.

MySQL Workbench


File Edit View Database Tools Scripting Help

Welcome to MySQL Workbench

MySQL Workbench is the official graphical user interface (GUI) tool for MySQL. It allows you to design, create and browse your database schemas, work with database objects and insert data as well as design and run SQL queries to work with stored data. You can also migrate schemas and data from other database vendors to your MySQL database.

[Browse Documentation >](#) [Read the Blog >](#) [Discuss on the Forums >](#)

MySQL Connections

 Filter connections

Local instance MySQL80

root

localhost:3306

1

CLIENTE MYSQL

MYSQL WORKBENCH

PANTALLA CLIENTE

The screenshot shows the MySQL Workbench interface. The top menu bar includes File, Edit, View, Query, Database, Server, Tools, Scripting, and Help. The toolbar contains various icons for file operations, database management, and execution. The left sidebar has a 'Navigator' section with 'SCHEMAS' and a list of databases: sakila, sys, and world. The main workspace is divided into two panes: 'Query 1' and 'SQLAdditions'. The 'Query 1' pane contains a single line of SQL code: '1'. The 'SQLAdditions' pane contains a message: 'Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.' Three red circles with numbers 1, 2, and 3 are placed on the interface. Red arrows point from these circles to three dark blue boxes with white text. Circle 1 points to the 'Schemas' tab in the bottom left. Circle 2 points to the 'sakila' database in the left sidebar. Circle 3 points to the 'Query 1' tab in the top center.

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

sakila

sys

world

Query 1 x 3

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

1

Limit to 10

Jump to

Administration Schemas 1

Information

No object selected

Context Help Snippets

BASES DE DATOS INSTALADAS

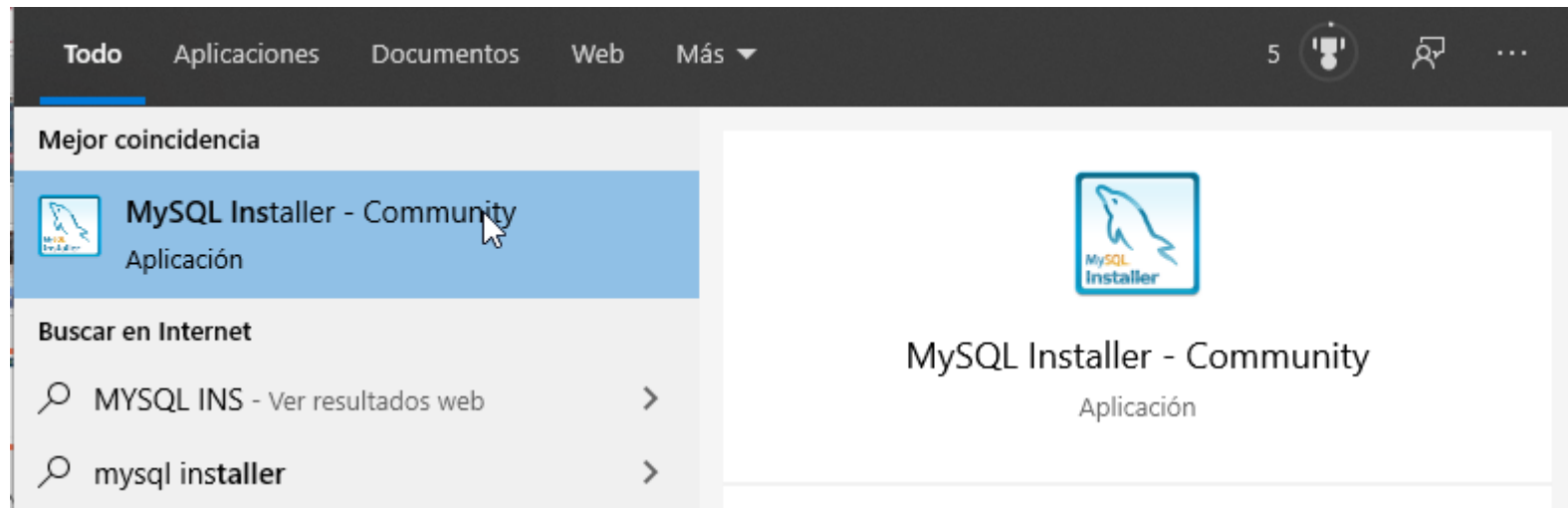
PESTAÑA PARA COLOCAR LAS CONSULTAS

PANEL DE BASE DE DATOS

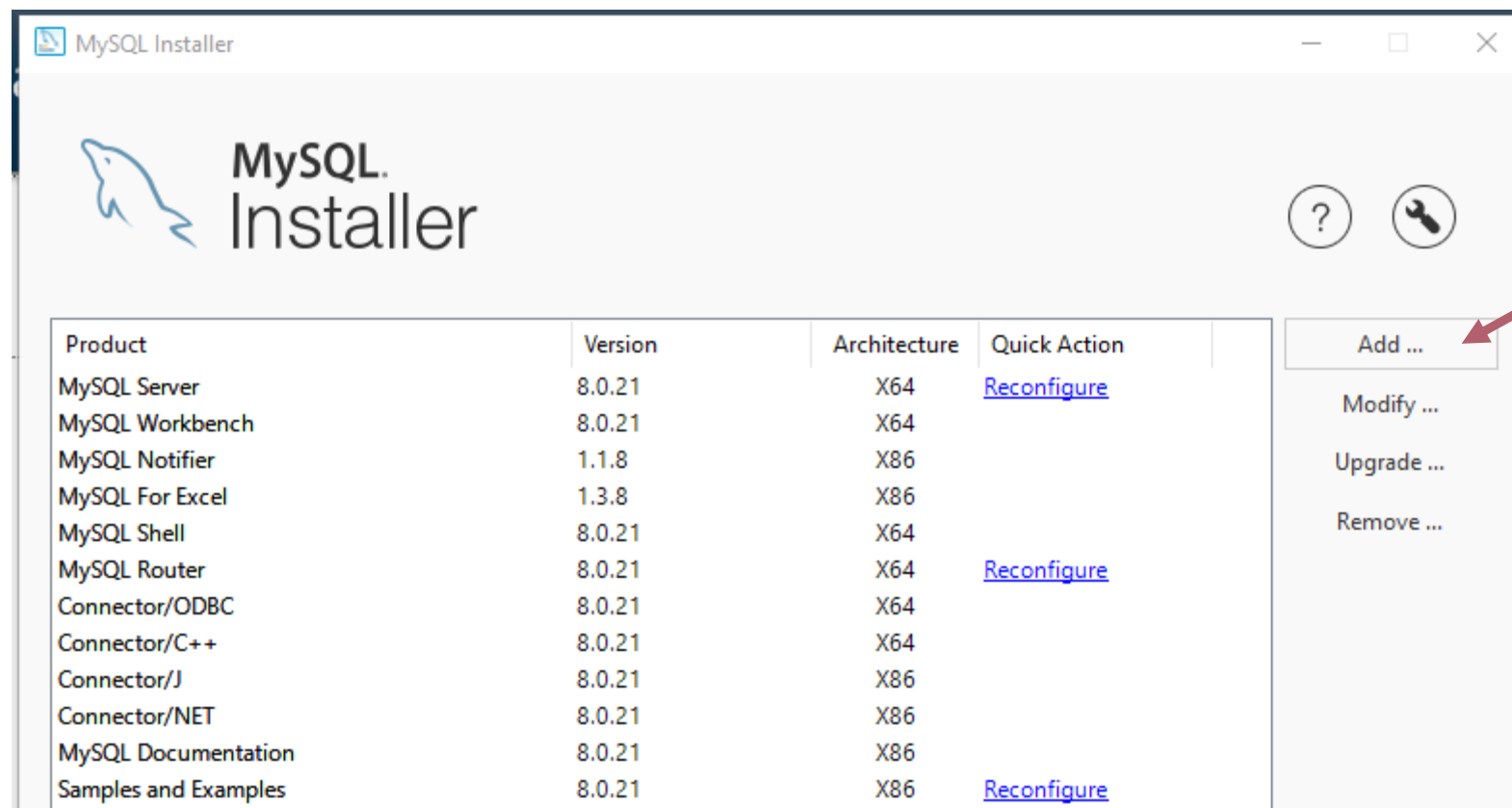


VAMOS A INSTALAR TAMBIEN LA VERSION 5.7

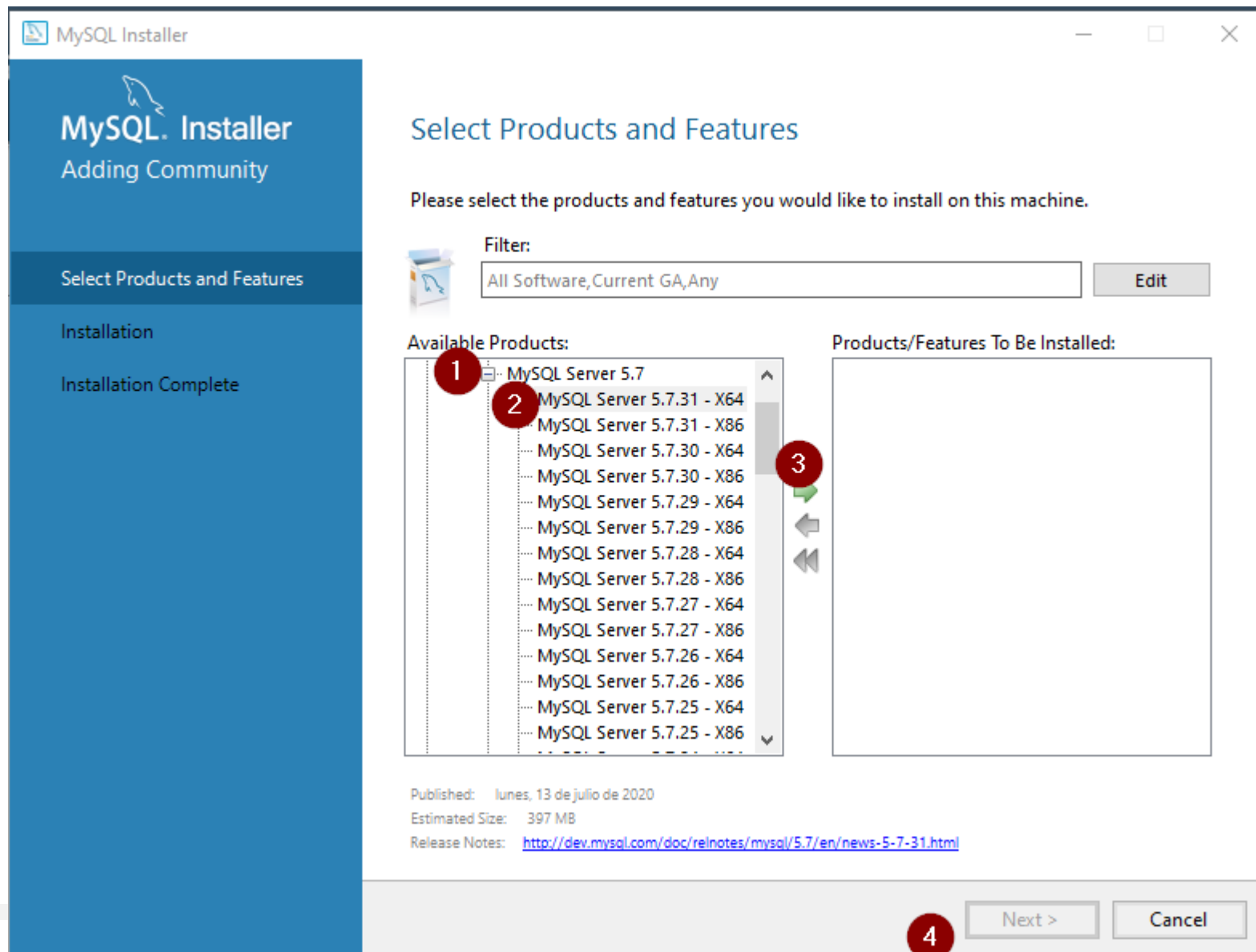
ARRANCAMOS EL MYSQL INSTALADOR



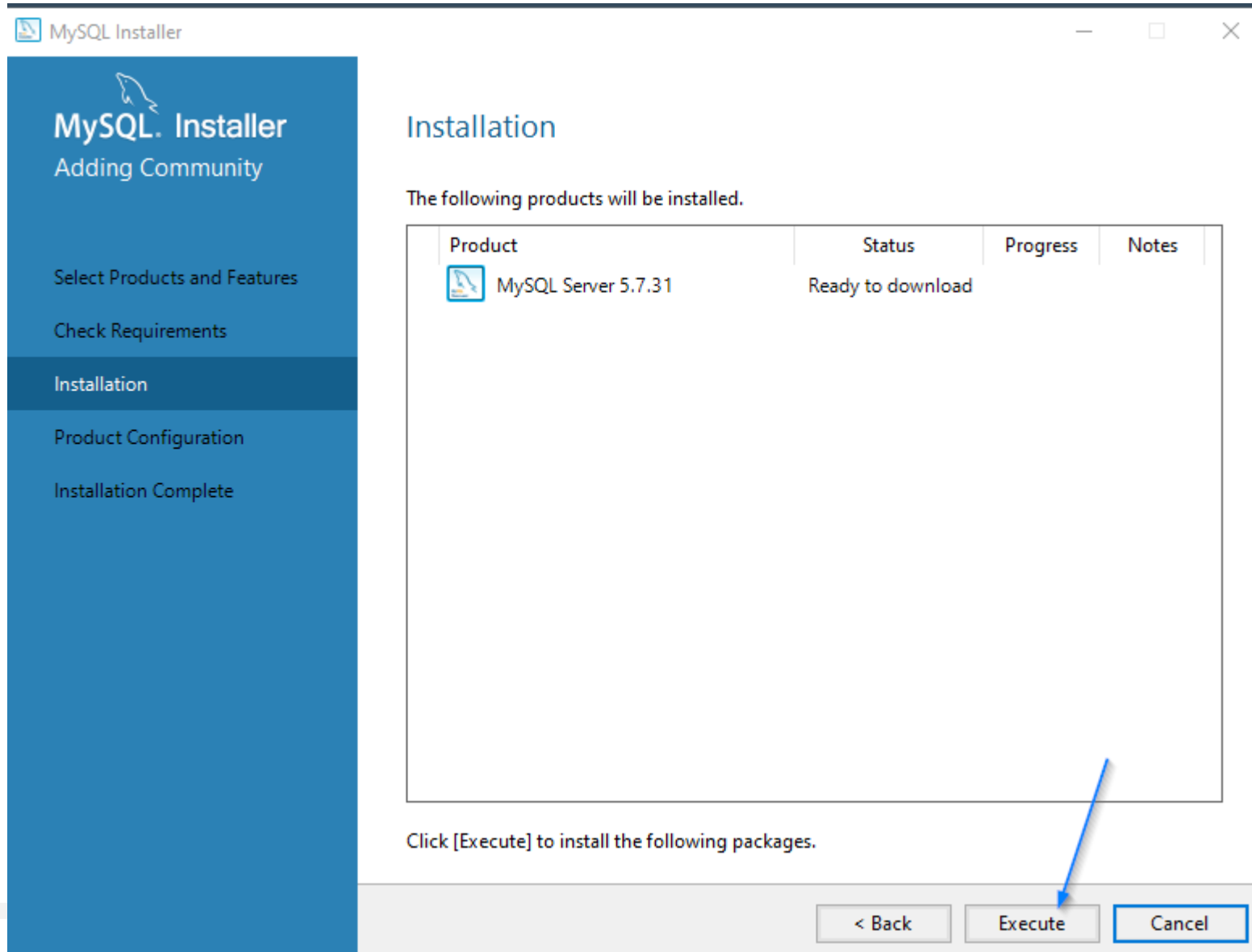
AÑADIMOS UN ELEMENTO NUEVO



AÑADIMOS MYSQL SERVER 5.7



AÑADIMOS MYSQL SERVER 5.7



MySQL Installer

MySQL Server 5.7.31

Type and Networking

Accounts and Roles

Windows Service

Apply Configuration

Type and Networking

Server Configuration Type

Choose the correct server configuration type for this MySQL Server installation. This setting will define how much system resources are assigned to the MySQL Server instance.

Config Type: Development Computer

Connectivity

Use the following controls to select how you would like to connect to this server.

☒ TCP/IP Port: 3306

☒ Open Windows Firewall port for network access

☐ Named Pipe Pipe Name: MYSQL

☐ Shared Memory Memory Name: MYSQL

Advanced Configuration

Select the check box below to get additional configuration pages where you can set advanced and logging options for this server instance.

☐ Show Advanced and Logging Options

Port: 3307

Next > Cancel

27

CONFIGURAR LOS USUARIOS

The image shows the MySQL Installer 'Accounts and Roles' screen. On the left is a sidebar with 'MySQL. Installer MySQL Server 5.7.31' and navigation links: 'Type and Networking', 'Accounts and Roles' (selected), 'Windows Service', and 'Apply Configuration'. The main area is titled 'Accounts and Roles' and contains two sections. The 'Root Account Password' section has two password fields labeled '1' and '2', with a 'Password strength: Weak' indicator. The 'MySQL User Accounts' section has a table with columns 'MySQL User Name', 'Host', and 'User Role'. It lists a user 'alpe' with host '%' and role 'DB Admin'. To the right of the table are buttons 'Add User' (labeled '3'), 'Edit User', and 'Delete'. At the bottom are '< Back', 'Next >' (labeled '7'), and 'Cancel' buttons. A modal dialog titled 'MySQL User Account' is open, showing fields for 'User Name' (labeled '4' with value 'alpe'), 'Host' (set to '<All Hosts (%)>'), and 'Role' (set to 'DB Admin'). It also has an 'Authentication' section with 'MySQL' selected. The 'MySQL user credentials' section has 'Password' (labeled '5') and 'Confirm Password' (labeled '6') fields, with a 'Password strength: Weak' indicator. The dialog has 'OK' and 'Cancel' buttons at the bottom.

MySQL Installer
MySQL Server 5.7.31

Type and Networking
Accounts and Roles
Windows Service
Apply Configuration

Accounts and Roles

Root Account Password
Enter the password for the root account. Please remember to store this password in a secure place.

MySQL Root Password:

Repeat Password:

Password strength: Weak

MySQL User Accounts

Create MySQL user accounts for your users and applications. Assign a role to the user that consists of a set of privileges.

MySQL User Name	Host	User Role
alpe	%	DB Admin

Add User
Edit User
Delete

< Back Next > Cancel

This setting will

MySQL User Account

Please specify the user name, password, and database role.

User Name: alpe
Host: <All Hosts (%)>
Role: DB Admin

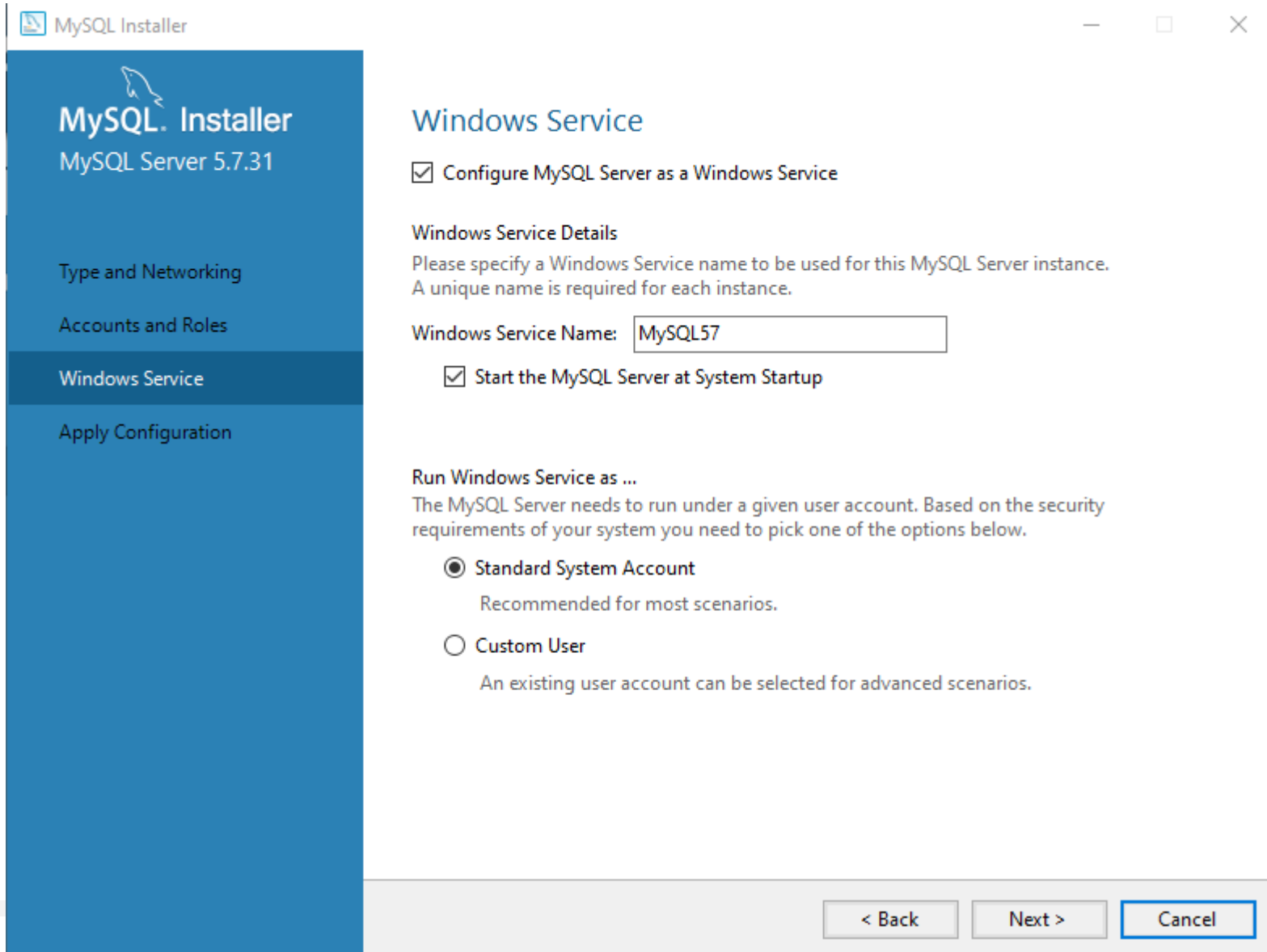
Authentication: ☒ MySQL

MySQL user credentials

Password:
Confirm Password:

Password strength: Weak

OK Cancel



MySQL Installer

MySQL Server 5.7.31

Type and Networking

Accounts and Roles

Windows Service

Apply Configuration

Windows Service

☒ Configure MySQL Server as a Windows Service

Windows Service Details
Please specify a Windows Service name to be used for this MySQL Server instance. A unique name is required for each instance.

Windows Service Name:

☒ Start the MySQL Server at System Startup

Run Windows Service as ...
The MySQL Server needs to run under a given user account. Based on the security requirements of your system you need to pick one of the options below.


☒ Standard System Account
Recommended for most scenarios.

☐ Custom User
An existing user account can be selected for advanced scenarios.

< Back Next > Cancel




ARRANCAMOS MYSQL WORKBENCH PARA PROBAR


The background is a soft-focus photograph of a child's hands painting a landscape on a piece of paper. The child is holding a wooden paintbrush in their right hand and has their left hand on the paper. The painting shows blue clouds and a green landscape. Overlaid on this image is a large, vibrant teal circle containing the text 'CREAMOS UNA NUEVA CONEXION'. Surrounding this central circle are several smaller, semi-transparent circles in various colors (orange, yellow, red, white) and icons: a puzzle piece in a white circle, a lightbulb in a yellow circle, and a thumbs-up in a red circle.

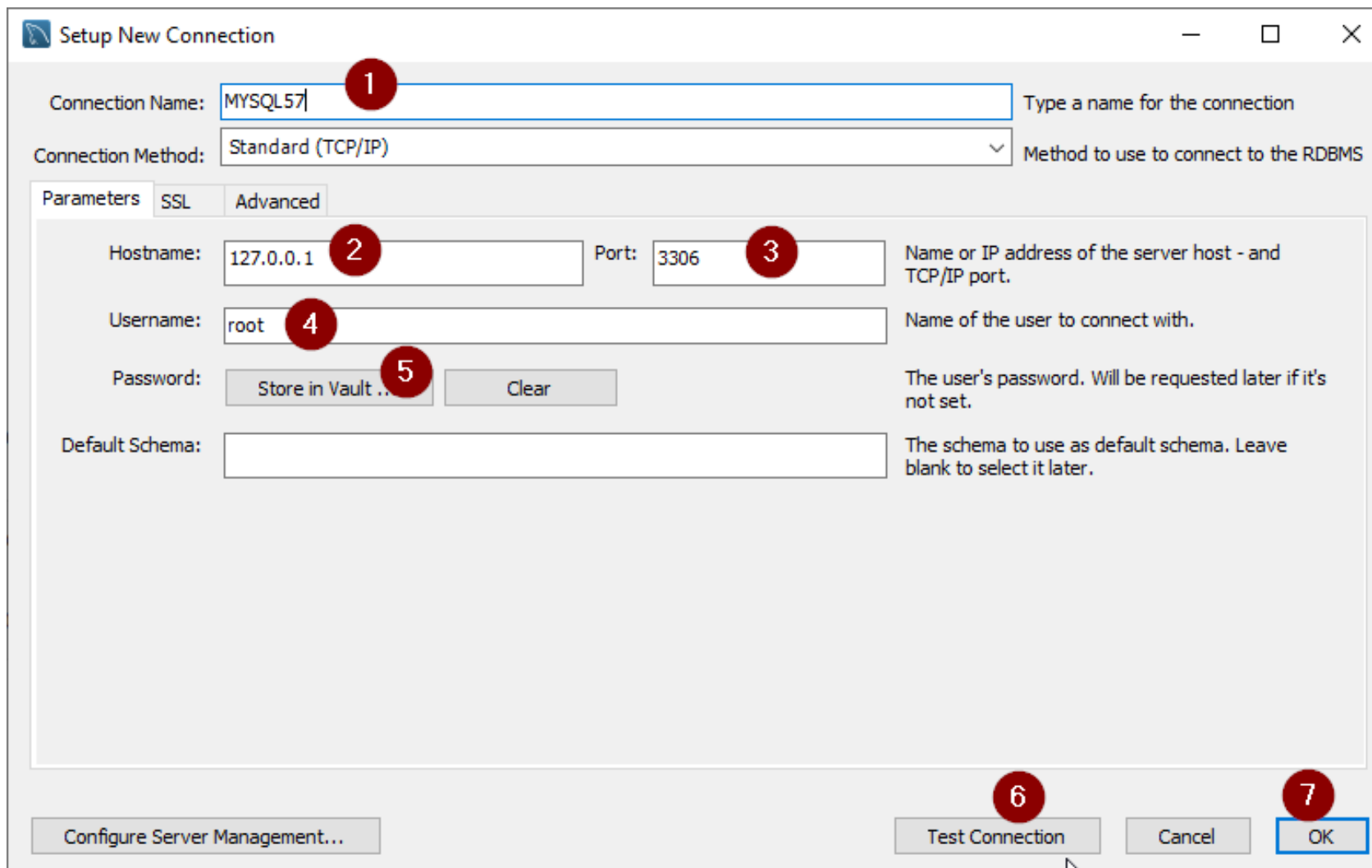
CREAMOS UNA NUEVA CONEXION

MySQL Connections

Local instance MySQL80

 root

 localhost:3306



Setup New Connection

Connection Name: **1** Type a name for the connection

Connection Method: Method to use to connect to the RDBMS

Parameters **SSL** **Advanced**

Hostname: **2** Port: **3** Name or IP address of the server host - and TCP/IP port.

Username: **4** Name of the user to connect with.

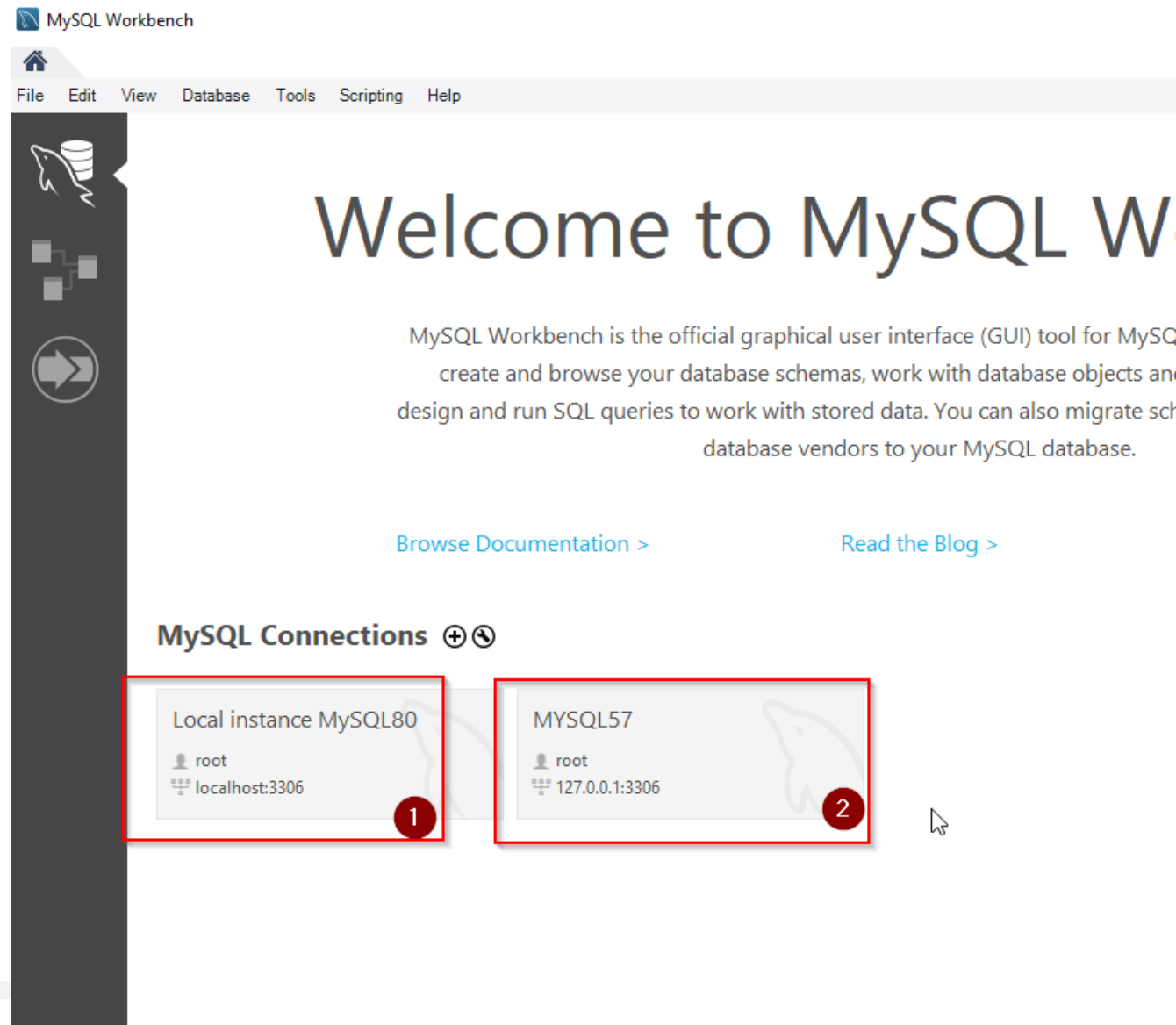
Password: **5** The user's password. Will be requested later if it's not set.

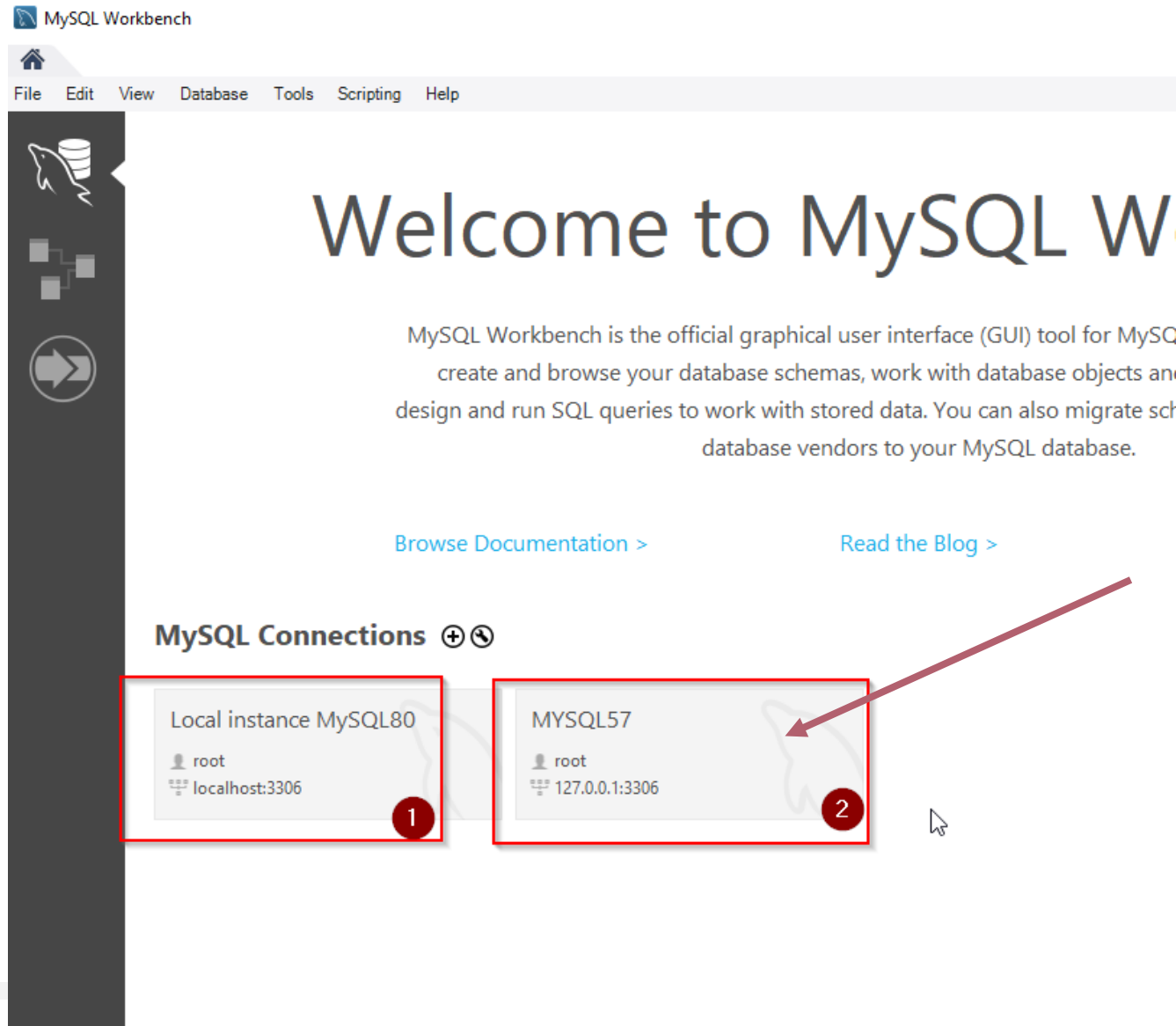
Default Schema: The schema to use as default schema. Leave blank to select it later.

6 **7**

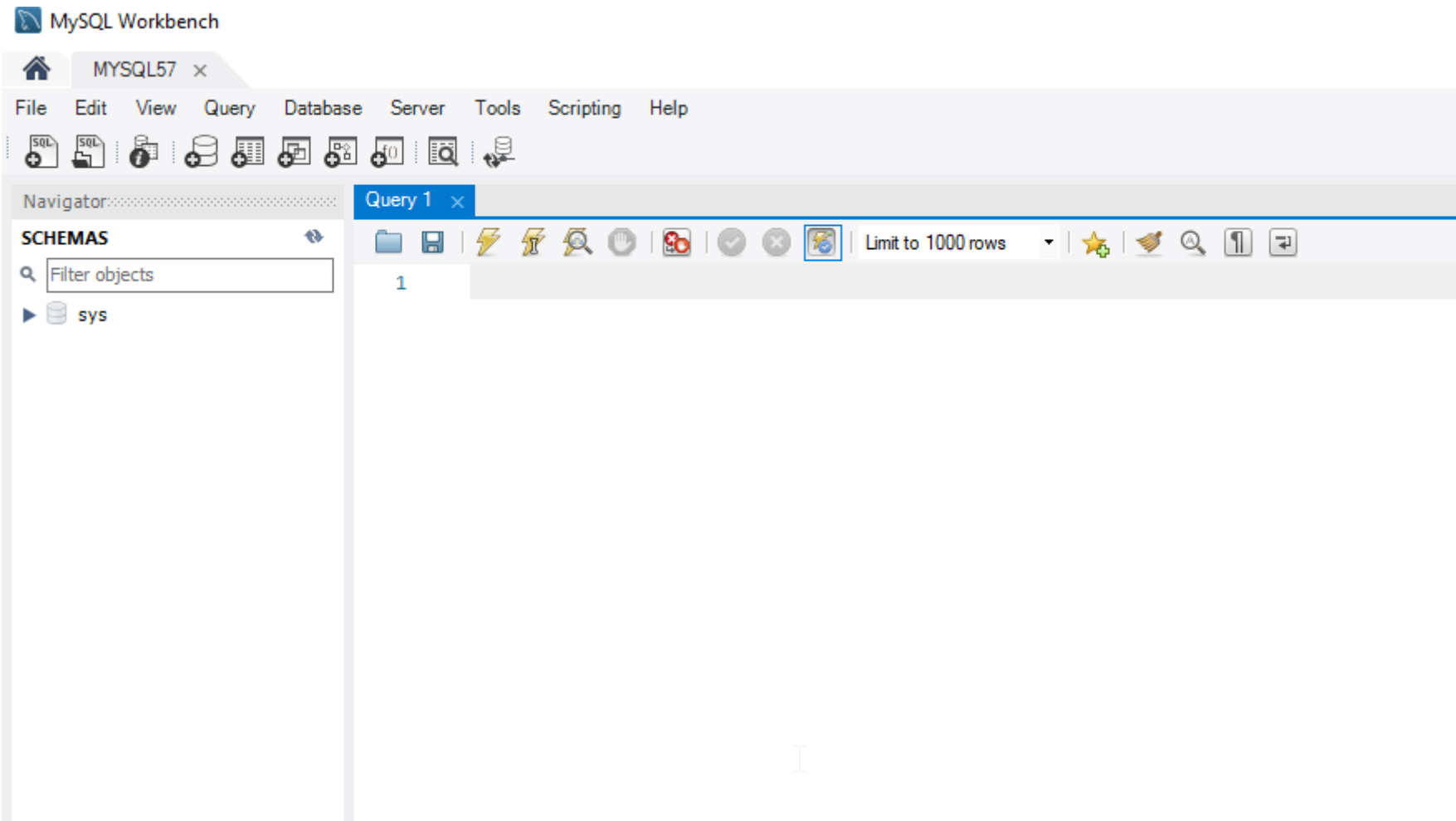
The background is a soft-focus photograph of a child's hands painting a landscape on a piece of paper. The child is holding a wooden paintbrush in their right hand and has their left hand on the paper. The painting shows blue clouds and a green landscape. Overlaid on this image is a large, vibrant teal circle containing the text 'PROBAR LA NUEVA CONEXION'. Surrounding this central circle are several smaller, semi-transparent circles in various colors (yellow, orange, red, white) and icons: a puzzle piece, a lightbulb, and a thumbs-up gesture.

PROBAR LA NUEVA CONEXION





PROBAR LA CONEXIÓN NUEVA



¿QUE ES SQL?

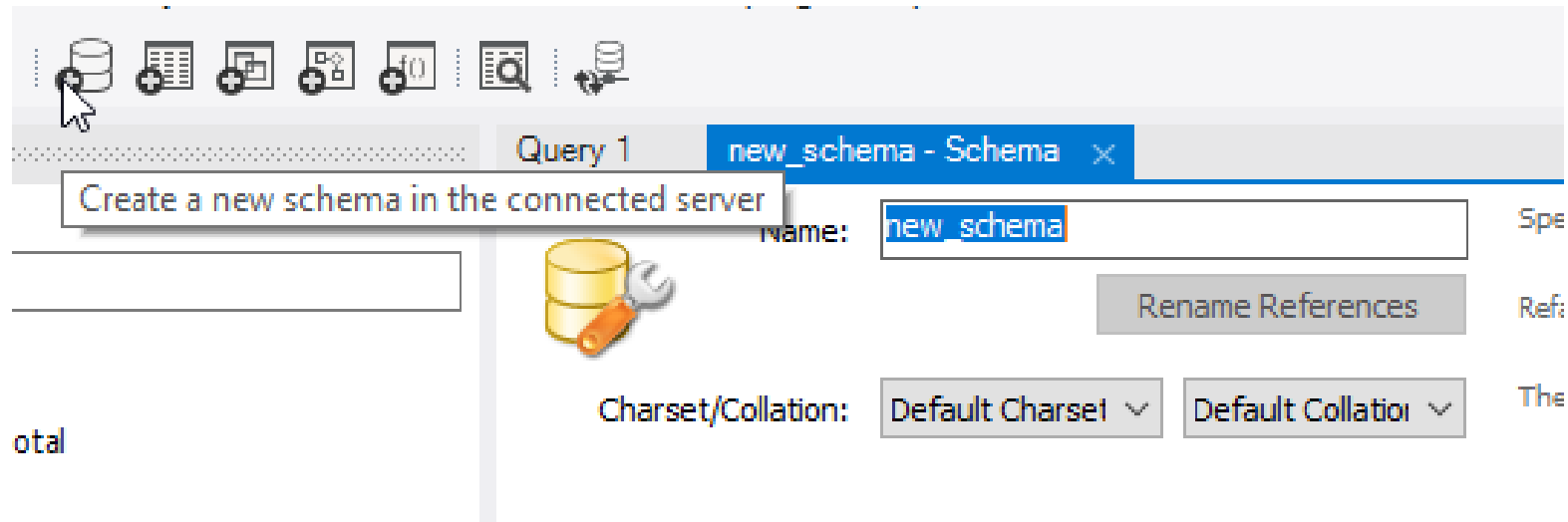
- UNA CONSULTA ES UNA OPERACIÓN A REALIZAR SOBRE UN SERVIDOR DE BASE DE DATOS
- TIPOS DE CONSULTAS
 - CONSULTAS SIRVEN PARA MANIPULAR DATOS (LMD)
 - SELECT
 - Estas consultas solo con código
 - CONSULTAS SIRVEN PARA GENERAR OBJETOS (LDD)
 - CREATE TABLE
 - Estas consultas las estamos viendo desde interface grafico
 - Workbench
 - Dbforge
 - Estas consultas las realizaremos desde código
 - CONSULTAS SIRVEN PARA CONFIGURAR EL SERVIDOR
 - Se vera desde programa
 - Se vera con codigo

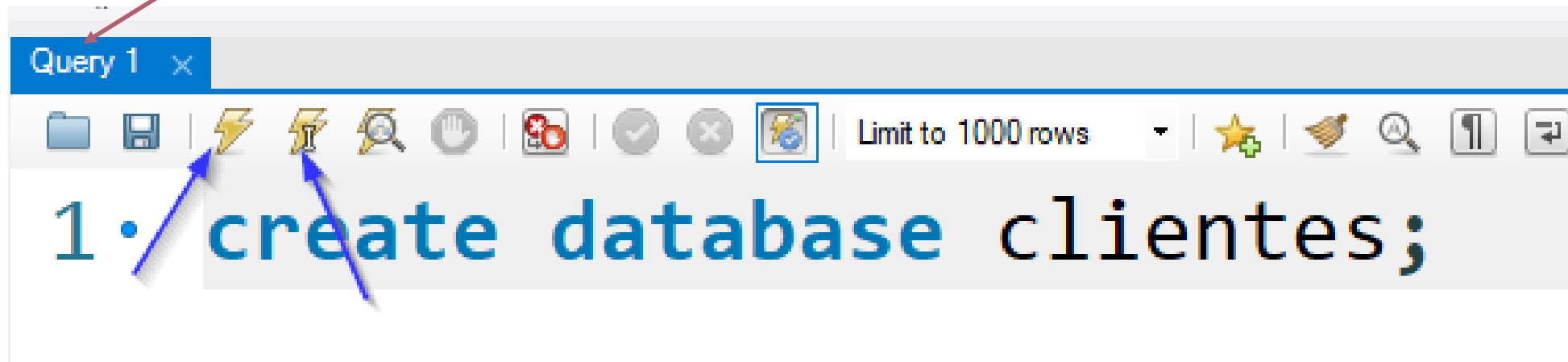
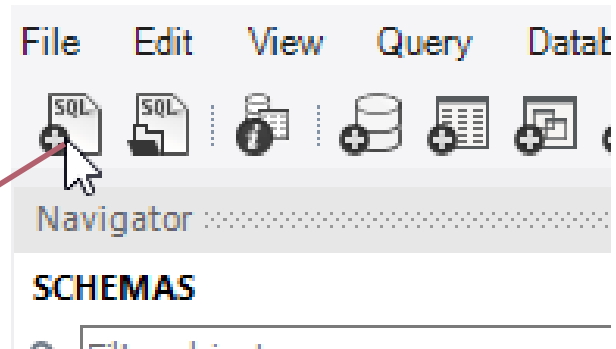
¿Qué lenguaje utilizo para realizar las consultas?

- SQL (ANSI)
 - Es un estándar sobre el que se basan otros lenguajes
- MYSQL
 - MYSQL 5.7
 - MYSQL 2.0
- SQL SERVER
- ORACLE

Lenguajes comerciales

- CLIENTE MYSQL (WORKBENCH)
 - GRAFICO
 - COMANDO (GUIONES)





2 • CREATE DATABASE otra;

¿QUE VERSIÓN TENEMOS ARRANCADA?

COMPROBAR LA VERSIÓN DEL SERVIDOR

COMPROBAMOS VERSIÓN DE MYSQL

COMANDO MYSQL DE CONTROL (DCL)

BEGIN.

EJECUTAR EN UNA PESTAÑA SQL

Query 1 x

Limit to 1000 rows

```
1 SHOW VARIABLES LIKE "%version%";
```

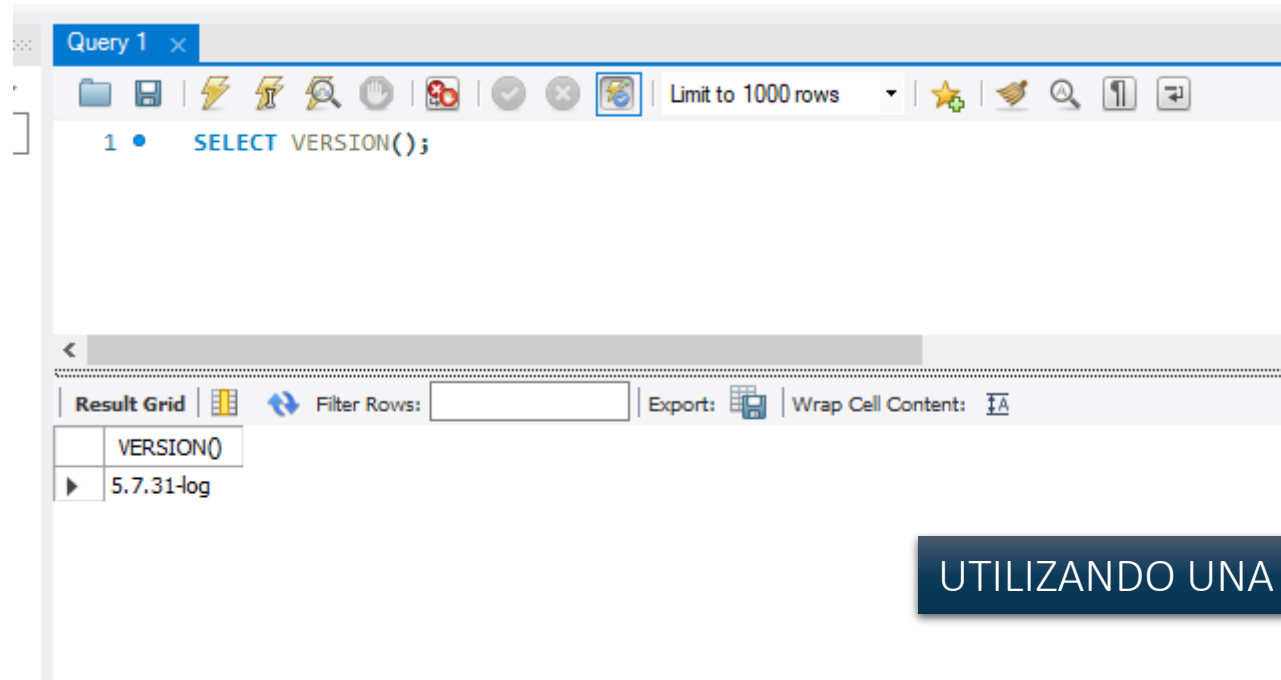
Result Grid | Filter Rows: | Export: | Wrap Cell Content: [\[A\]](#)

Variable_name	Value
innodb_version	5.7.31
protocol_version	10
slave_type_conversions	
tls_version	TLSv1,TLSv1.1,TLSv1.2
version	5.7.31-log
version_comment	MySQL Community Server (GPL)
version_compile_machine	x86_64
version_compile_os	Win64

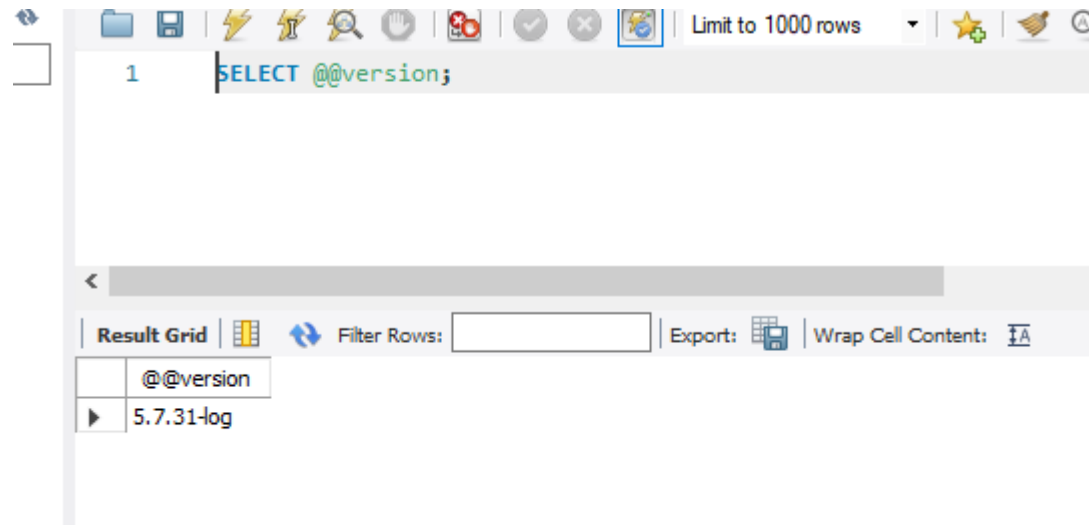
COMPROBAMOS VERSIÓN DE MYSQL

COMANDO MYSQL DE MANIPULACIÓN
(DML)

BEGIN.



UTILIZANDO UNA FUNCIÓN



UTILIZANDO UNA VARIABLE DE SERVIDOR

```
1  /*
2      Instrucciones de definicion de datos
3  */
4• CREATE DATABASE clientes;
5• CREATE DATABASE otra;
6  -- Instrucciones de control
7• SHOW VARIABLES; /* comentarios */
8• SHOW VARIABLES LIKE "%version%"; -- comentarios
9  # Instrucciones de manipulacion de datos
0• SELECT 'hola';
1• SELECT version(); -- utilizando una funcion
2• SELECT @@version; -- utilizando una variable
```

The background is a blurred image of a person's hands writing on a piece of paper with a pencil. A large, semi-transparent teal circle is centered over the image, containing the title text.

RELACION ENTRE LOS MODELOS Y EL SQL



- Modelo conceptual
- Modelo relacional
 - Esquema de relaciones

Esto esta vinculado con el LDD

Tendremos que estudiar las
clausulas de SQL para generar
objetos en el servidor

- Vamos a estudiar una forma de convertir nuestros modelos en sentencias SQL

- ESTATICA (CONSULTAS DE DEFINICION DE DATOS)
- DINAMICA (CONSULTAS DE MANIPULACION DE DATOS)