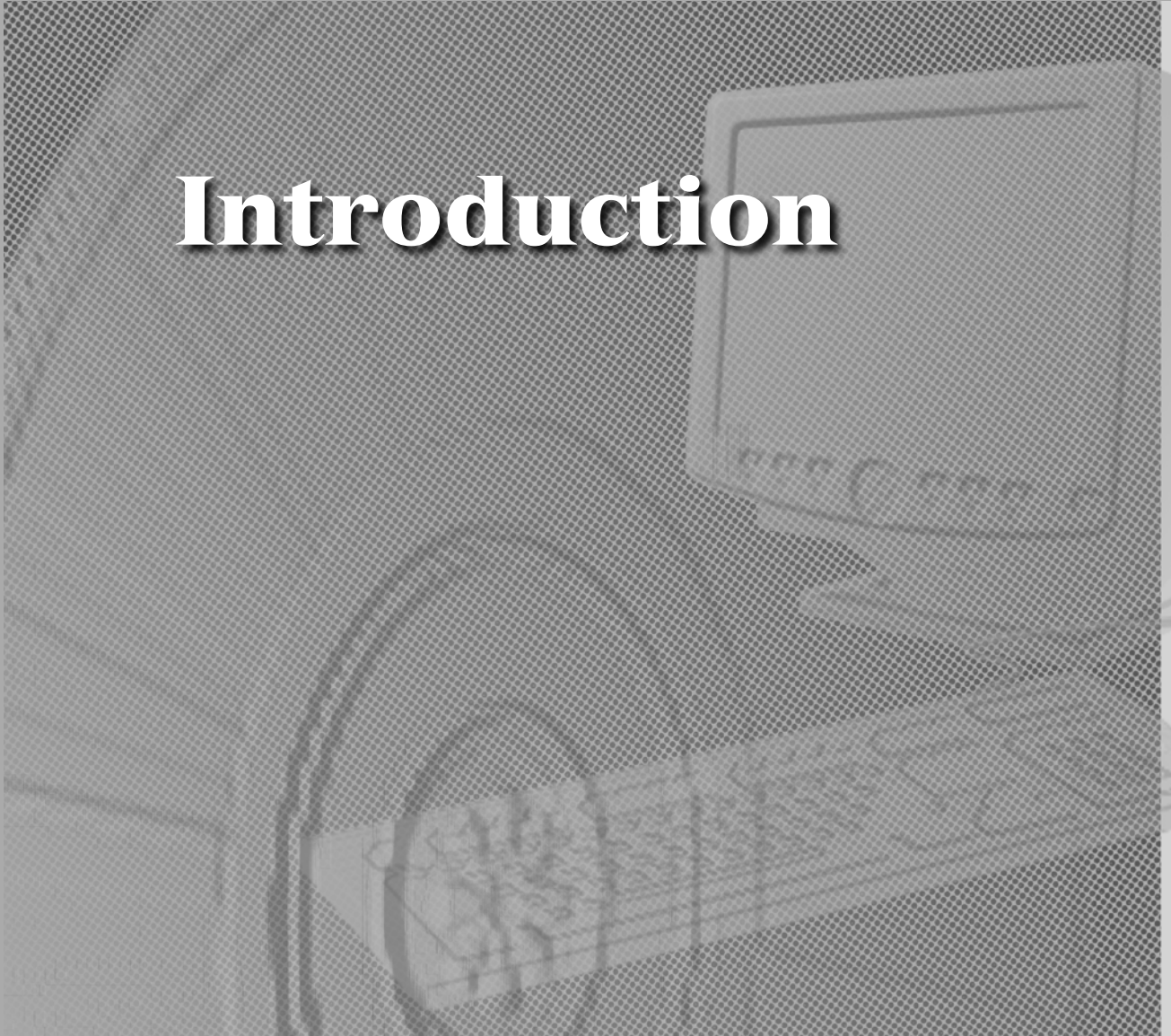


Introduction



Introduction

The PRECIS.*pc* Specimen Database is a PC version of the Specimen component of PRECIS (National Herbarium, Pretoria (**PRE**), **C**omputerised **I**nformation **S**ystem). This database is used to store information extracted from herbarium specimen labels, thus maintaining a comprehensive electronic record of the collection in a herbarium. This information is then accessible for manipulation in a variety of ways, such as the generation of labels for new specimens being accessioned into the herbarium.

The Specimen database consists of a discrete front-end database, *SpmnDb.exe*, developed with Delphi. This attaches, via an ODBC driver, to a Specimen database (SpmnData), developed with MySQL. Separate data entry routines exist for Existing and New Specimens depending on whether labels are required or not. Data is captured with the aid of data entry forms and sub-forms. The database comprises over 70 tables including 31 primary tables, 16 systems tables and 24 lookup (data dictionary) tables. Where possible, standard lists of variables are housed in the “look-up tables”, which can be expanded by users as required.

Listings (to screen or disk) of grid references for taxa can be created, from which computer-generated distribution maps can be produced using the National Botanical Institute’s (NBI) MAPPIT program. Detailed user-specified reports at the family, genus and taxon levels, or for single collectors, can also be generated. Output constitutes all the information entered for each specimen. Draft or final specimen labels for mounting on specimen sheets may also be printed.

The database can operate as a stand-alone system or as a multi-user network. If more than one stand-alone computer (not networked) is used to capture information, this data can be moved from the secondary computer(s) to the main computer by means of the Import/Export option. An added feature of the Specimen Database system is that specimen records entered by a herbarium can be made available to other herbaria using the same system.

Computer requirements:

Server

- CPU: Pentium 4, 1.8 GHz (minimum requirement)
- RAM: 256 Mb
- IOMEGA 250 Mb/750 Mb ZIP drive or another data backup facility – highly recommended
- Windows: XP (Professional preferred), 2000
- MySQL version 4.0.16 (provided)
- UPS (Uninterrupted Power Supply): highly recommended in areas with electrical fluctuations

PC

- CPU: Pentium 4, 1000 MHz (minimum requirement)
- RAM: 128 Mb
- Windows: 98, XP (Professional preferred), 2000
- MySql ODBC 3.51 driver (provided)



Chapter 1

**Installing the MySQL service
and specimen database**

Installing the MySQL service and specimen database

1.1 First-time installation

Insert installation CD into CD-drive. The auto-run program will be initiated, resulting in the Installation Menu being displayed. See Figure 1 below.

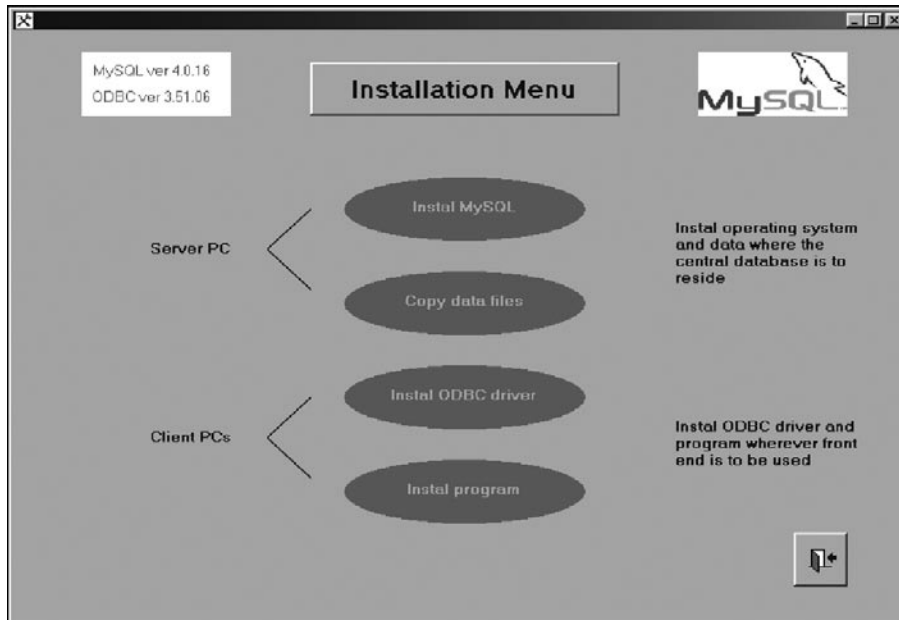


Fig. 1. MySQL software and Specimen database Installation Menu.

The Installation menu includes four installation components, namely:

1. Installation of MySQL operating system
2. Installation of PRECIS Specimen database files
3. Installation of MySQL ODBC driver
4. Installation of Delphi front-end program

Installation of the four components is dependent on how the computers are configured, namely:

Stand-alone PC:

- Install components 1, 2, 3 and 4.

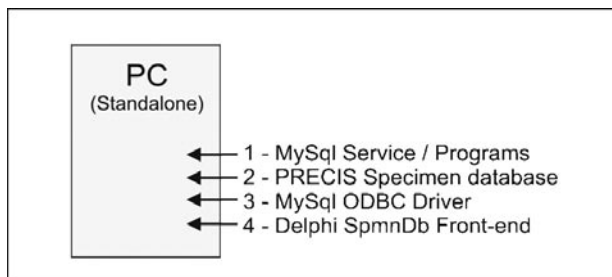


Fig. 2. Stand-alone PC showing four components to be installed.

Peer-to-peer network: (Two or more PCs, with one acting as a Server)

- PC to house the database (Server) – install components 1 and 2
- All PCs used to access the database (may also include PC acting as a Server) – install components 3 and 4

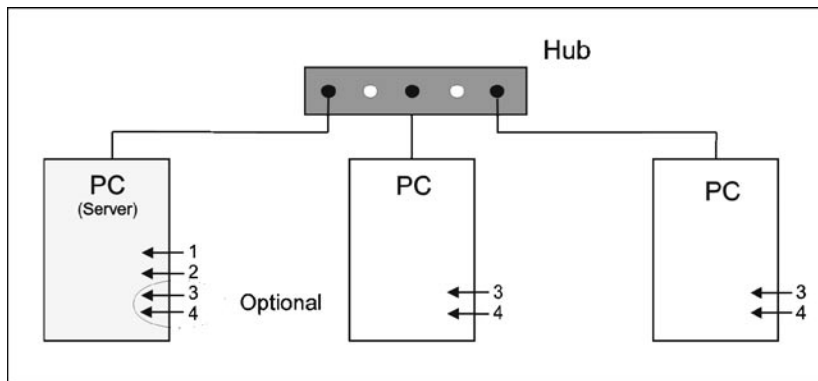


Fig. 3. Peer-to-peer network showing components to be installed on the Server and PCs.

Client / Server network: (Dedicated Server with workstations)

- Server – install components 1 and 2
- All workstations (PCs) used to access the database – install components 3 and 4

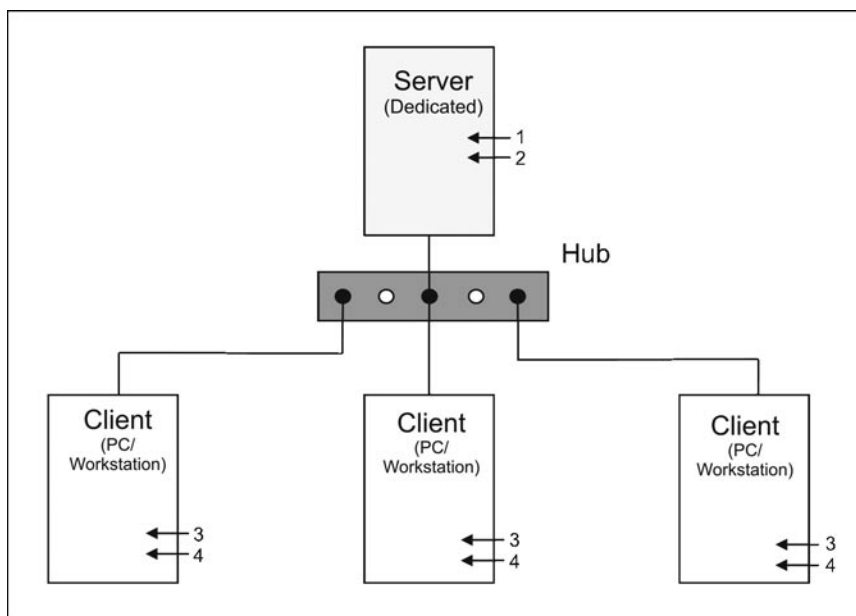


Fig. 4. Client / Server network showing the components to be installed on the Server and PCs.

Installing component 1: The MySQL software

At the Installation menu [click] the button “Install MySQL”

— The *MySQL Servers and Clients* installation window will appear

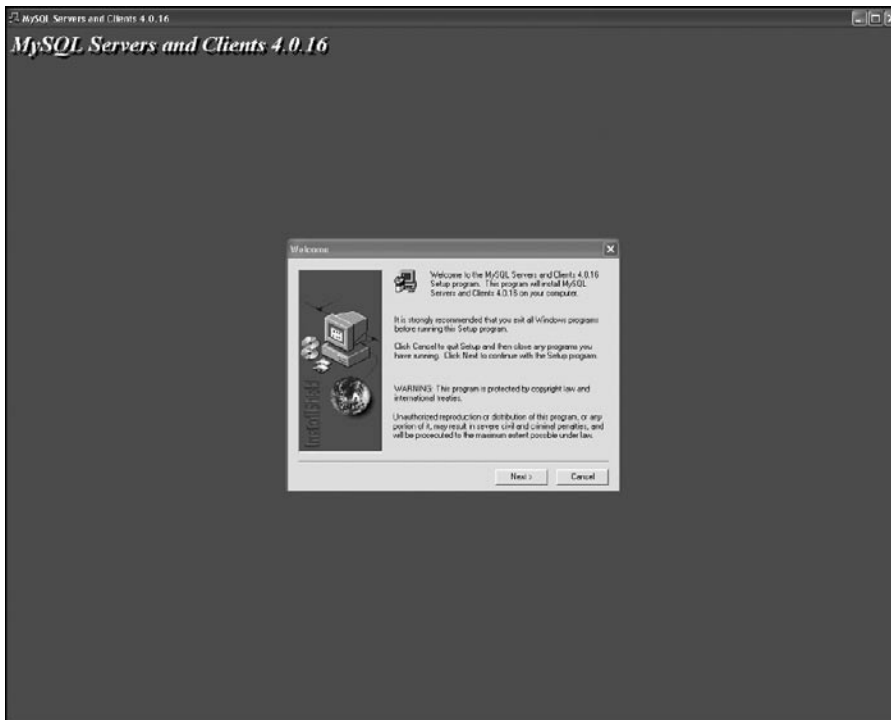


Fig. 5. MySQL Servers and Clients installation window.

— Inside this window will be a smaller “Welcome” window



Fig. 6. MySQL Servers and Clients installation “Welcome” window.

- Click [Next]

— This will open the “Information” window

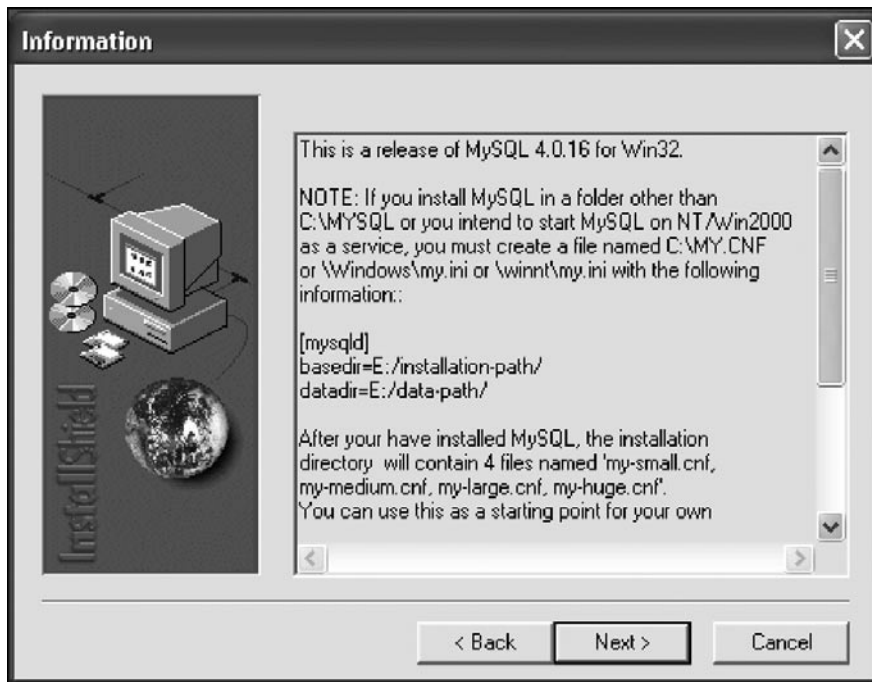


Fig. 7. MySQL Servers and Clients installation “Information” window.

- Click [Next]
- This will open the “Choose Destination Location” window



Fig. 8. MySQL Servers and Clients installation “Choose Destination Location” window.

- Accept the default Destination Folder “C:\mysql”
- Click [Next]

— This will open the “Setup Type” window

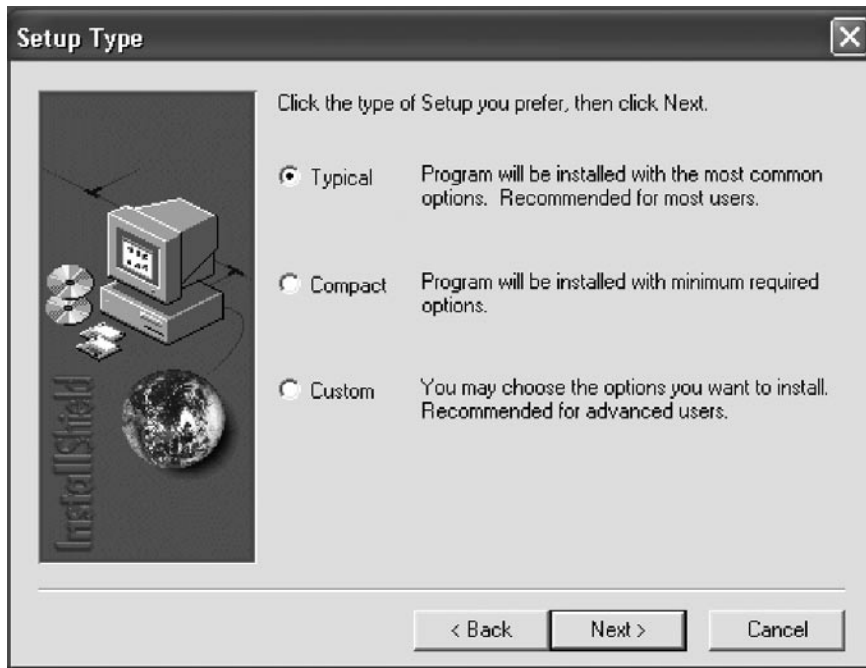


Fig. 9. *MySQL Servers and Clients* installation “Setup Type” window.

- Accept the default type “Typical”
- Click [Next]

— This will install the MySQL software

- An installation progress bar will be displayed

— The “Setup Complete” window will be displayed



Fig. 10. *MySQL Servers and Clients* installation “Setup Complete” window.

- Click [Finish] to complete the MySQL installation

— A tick will appear to the right of the “Install MySQL” button

Installing component 2: The data files

At the Installation Menu [Click] the “Copy Data files” button

— This will copy the data files from the CD to the hard drive

Installing component 3: The MySQL ODBC Driver

At the Installation menu [click] the “Install ODBC driver” button

— This will display the “MySQL Connector ODBC” installation window

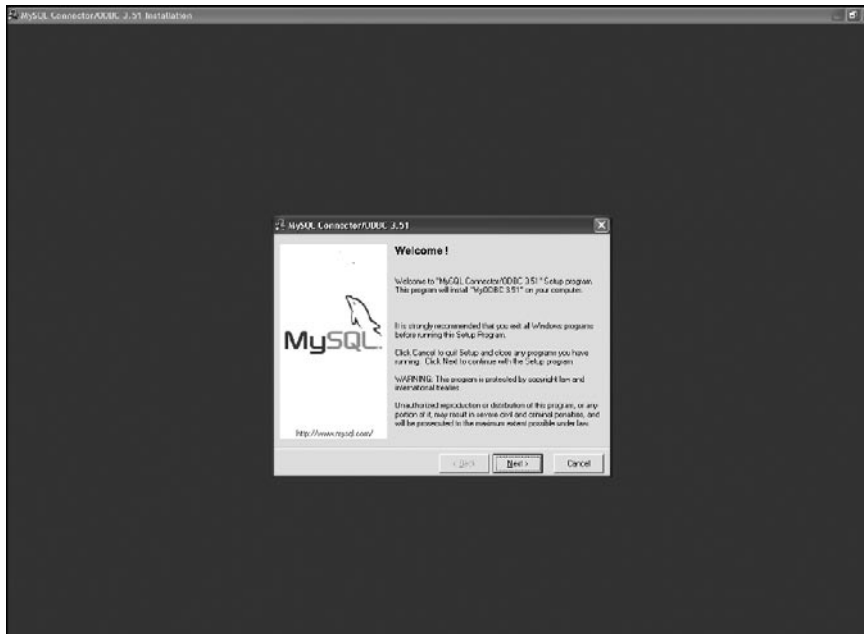


Fig. 11. MySQL Connector/ODBC Driver installation window.

— Inside this window is a smaller “Welcome” window

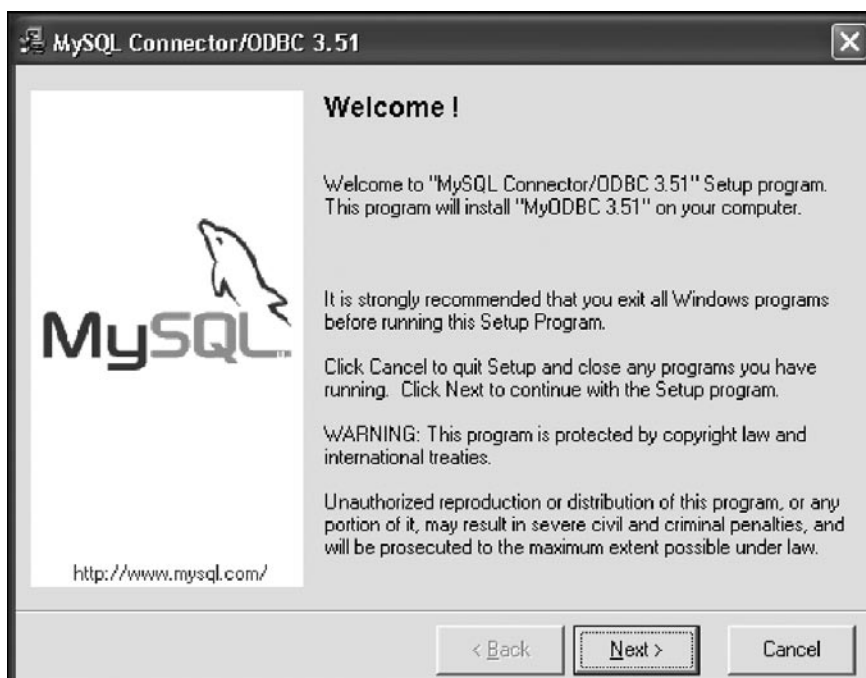


Fig. 12. MySQL Connector/ODBC Driver installation “Welcome” window.

- Click [Next]
- This will open the “Readme” window

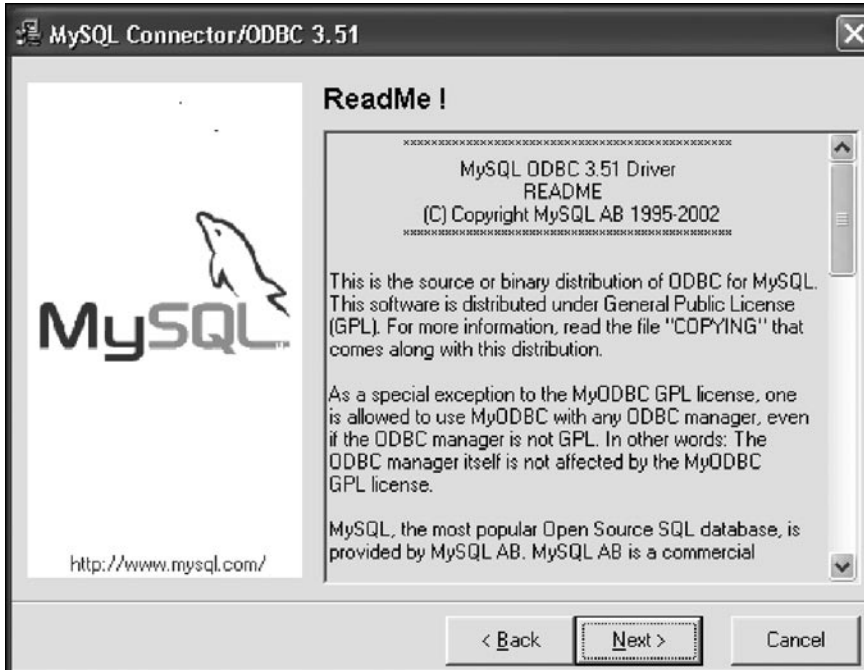


Fig. 13. *MySQL Connector/ODBC Driver* installation “Readme!” window.

- This provides copyright and license information
 - Click [Next]
- This will open the “Start Installation” window



Fig. 14. *MySQL Connector/ODBC Driver* “Start Installation!” window.

- Click [Next]
- This will open the “Finished!!!” window