

MICROSOFT ACCESS AND MYSQL

EXTERNAL DATA

Microsoft Access can import and link to data from external sources:

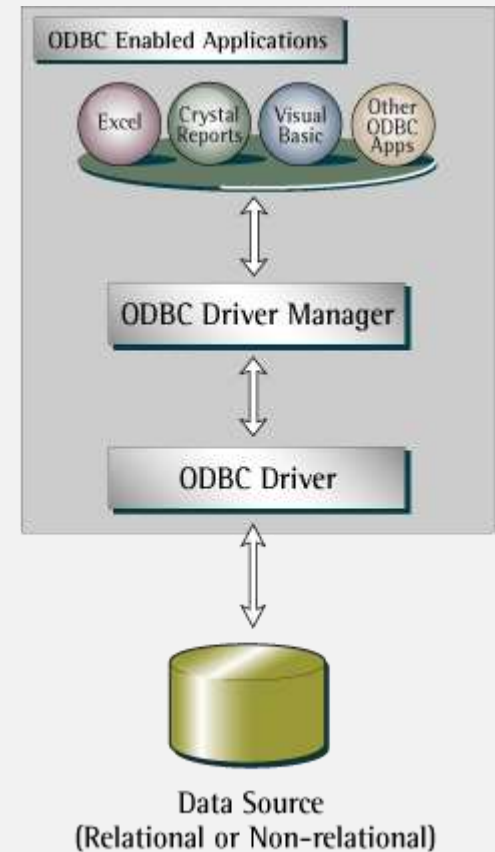
- Text files
- Excel
- SharePoint
- Enterprise Databases

ODBC

- Open Database Connectivity
- Windows API for database access
- Allows an application to access data in any DBMS that provides an ODBC Driver

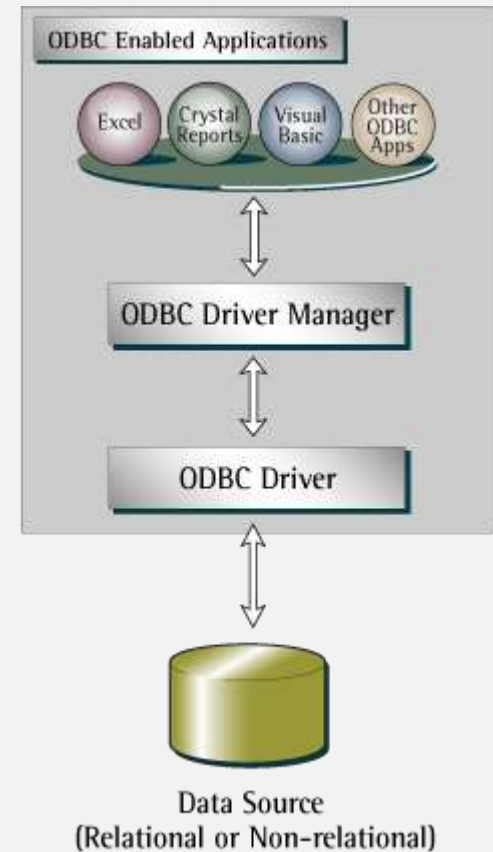
ODBC ARCHITECTURE

- Applications interact with ODBC Driver Manager to
 - Open connection to database
 - Issue commands to database
- ODBC Driver Manager
 - Maintains list of registered drivers
 - Maintains list of registered data sources
 - Interacts with drivers



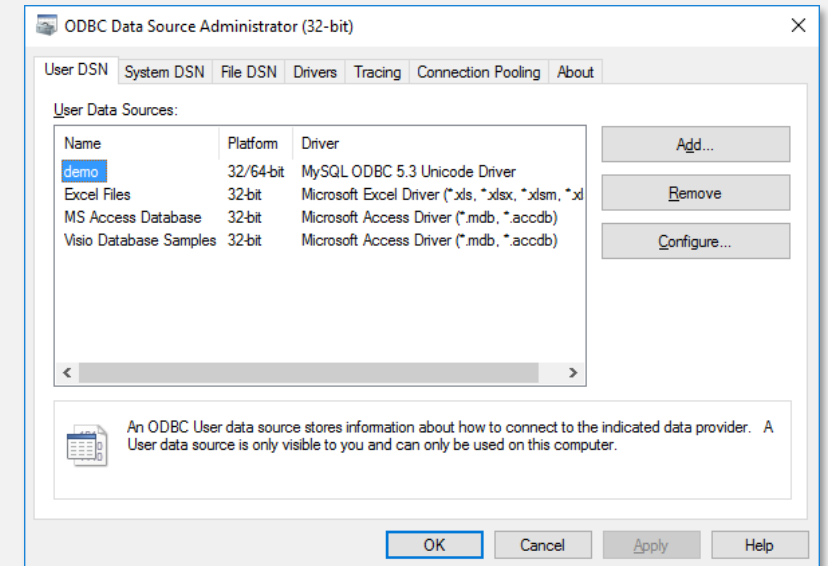
ODBC ARCHITECTURE

- ODBC Driver
 - Implements ODBC API to communicate with a specific DBMS
 - Processes SQL commands issued by application and returns results
 - Provided by vendor of DBMS
- Data Source
 - Typically a relational database
 - ODBC Data Source defines connection parameters



ODBC DATA SOURCE ADMINISTRATOR

- Windows control panel utility
- Displays installed drivers
- Use to add / remove / configure ODBC Data Sources



DATA SOURCE CONFIGURATION

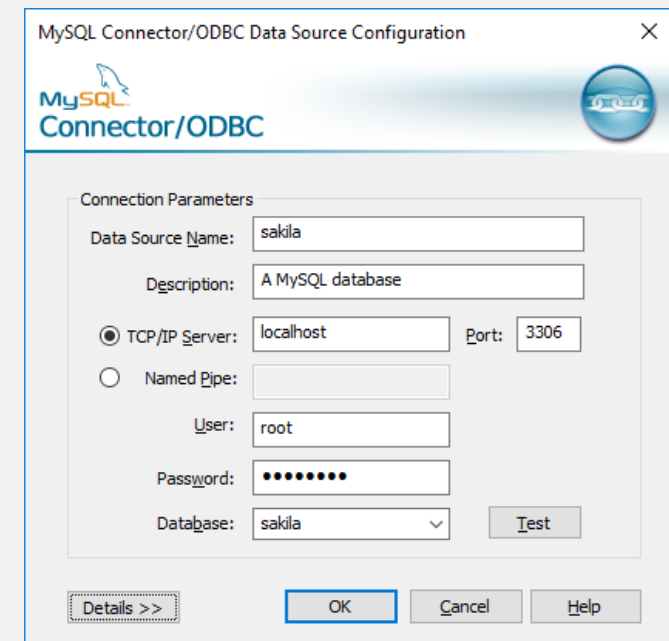
- ODBC Data Source defines connection parameters for a database
- Data Source can be stored
 - In the Registry:
 - User DSN: User-specific DSN
 - System DSN: Available to all users
 - In a file:
 - File DSN

32-BIT VS. 64-BIT

- ODBC "stack" comes in 32-bit and 64-bit flavors
- Both are installed on Windows
- 32-bit applications use 32-bit ODBC Driver Manager and 32-bit ODBC drivers
- 64-bit applications use 64-bit ODBC Driver Manager and 64-bit ODBC drivers

LINKING ACCESS TO MYSQL

1. Install correct MySQL ODBC Driver to match "bitness" of Access
2. Use ODBC Data Source Administrator to create a Data Source
3. Use Access to link to ODBC data source



LINKING VS. IMPORTING

- **Import** copies data from MySQL to Access table
 - Changes to Access table do not affect MySQL
- **Link** establishes two-way link between MySQL and Access table
 - Edits to table data in Access directly modify MySQL table

