

PHP

(Database-ODBC)

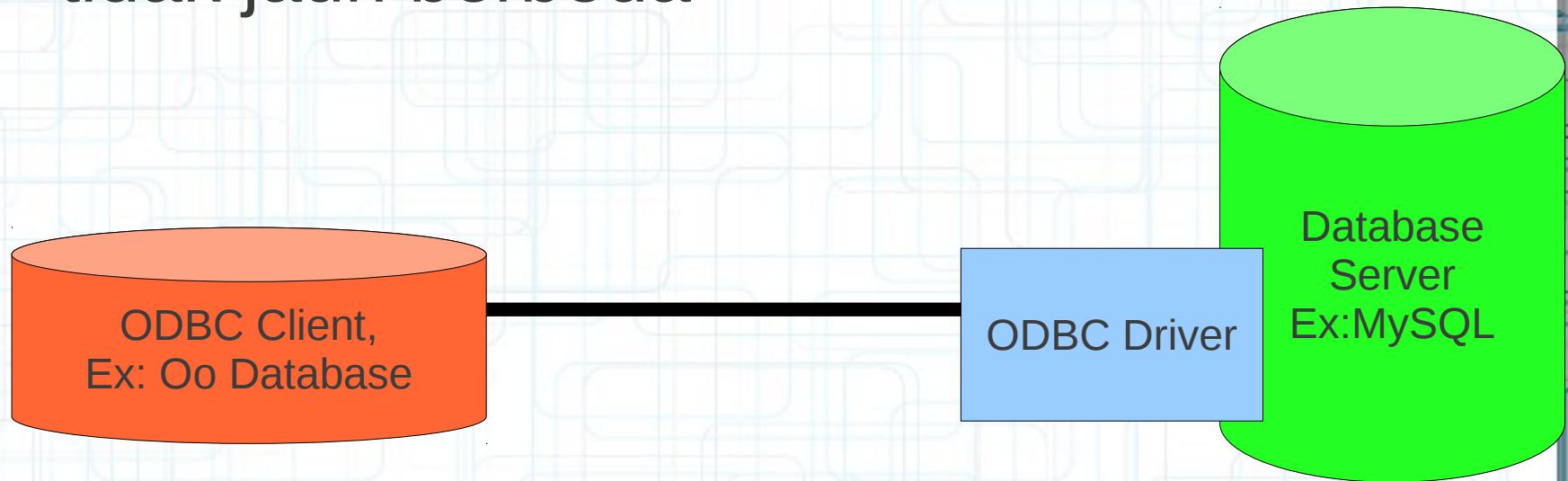
ODBC

- PHP has built in function to manage ODBC
- Open Database Connectivity, diperkenalkan oleh Microsoft
- Interface for accessing data in a heterogeneous environment of relational and non-relational database management systems.
- Standard to connect to several databases

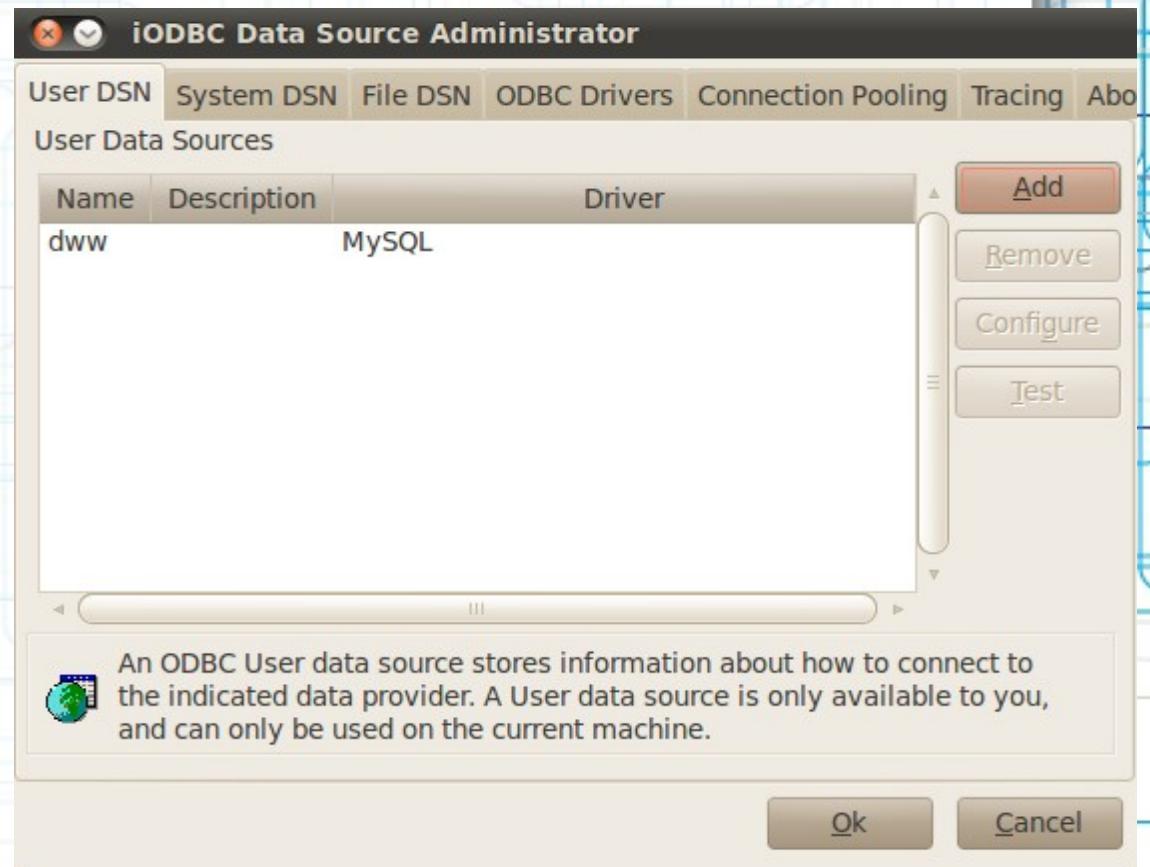
- ODBC bisa sebagai "front-end" or "client" desktop application,
- also known as an "**ODBC Client.**"
- This is the application that the computer-user sees on the computer screen.
- Ex: Microsoft Access, OpenOffice Database

- ODBC Driver for a "back-end" or "server" DBMS (Database Management System).
- This server application is usually more robust (faster, with centralized security, and backups of data, and so forth) than the client application.
- The ODBC Driver resides between the ODBC Client and the DBMS
- However, it is loaded on the front-end computer. Ex: Microsoft ODBC Driver Pack, MySQL ODBC driver

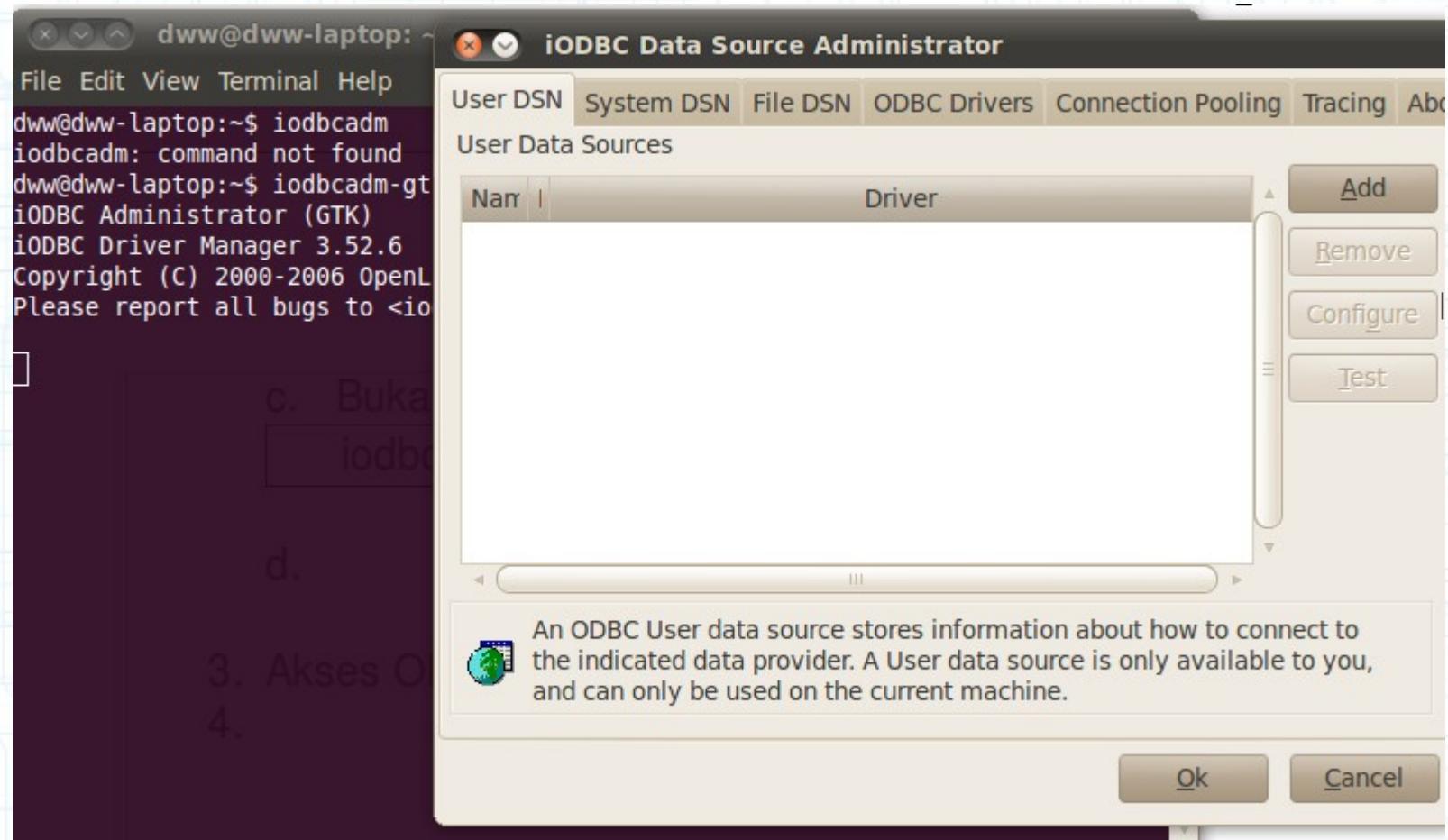
- Secara sederhana, ODBC front-end terhubung ke DB Server melalui ODBC back-end
- Berikut contoh ODBC Client Oo Database, ODBC Driver untuk MySQL
- Untuk Ms.Access, ODBC Driver untuk MySQL tidak jauh berbeda



- What we need install the ODBC front-end and back-end
- Depend on platform such as Windows or Ubuntu
- Case in Ubuntu



- Configure ...
- For "Driver file name" choose /usr/lib/odbc/libmyodbc.so
- For "Setup file name" choose /usr/lib/odbc/libodbcmyS.so
- Configure connection, ex: dww
- Buat odbc-database dari ODBC front-end



iODBC Data Source Administrator

User DSN System DSN File DSN ODBC Drivers Connection Pool

ODBC Drivers that are installed on your system

Name	File	Date	Size
MySQL	/usr/lib/odbc/libmyodbc.so	##.##	176 Kb

Add a driver Remove the driver Config

An ODBC driver allows ODBC-enabled programs to get information about ODBC data sources. To install new drivers, use the driver's setup program if available, or add it with the 'Add' button.

ODBC Driver Add/Setup

ODBC Driver Add/Setup

Description of the drive MySQL

Driver file name /usr/lib/odbc/libmyodbc.so Browse

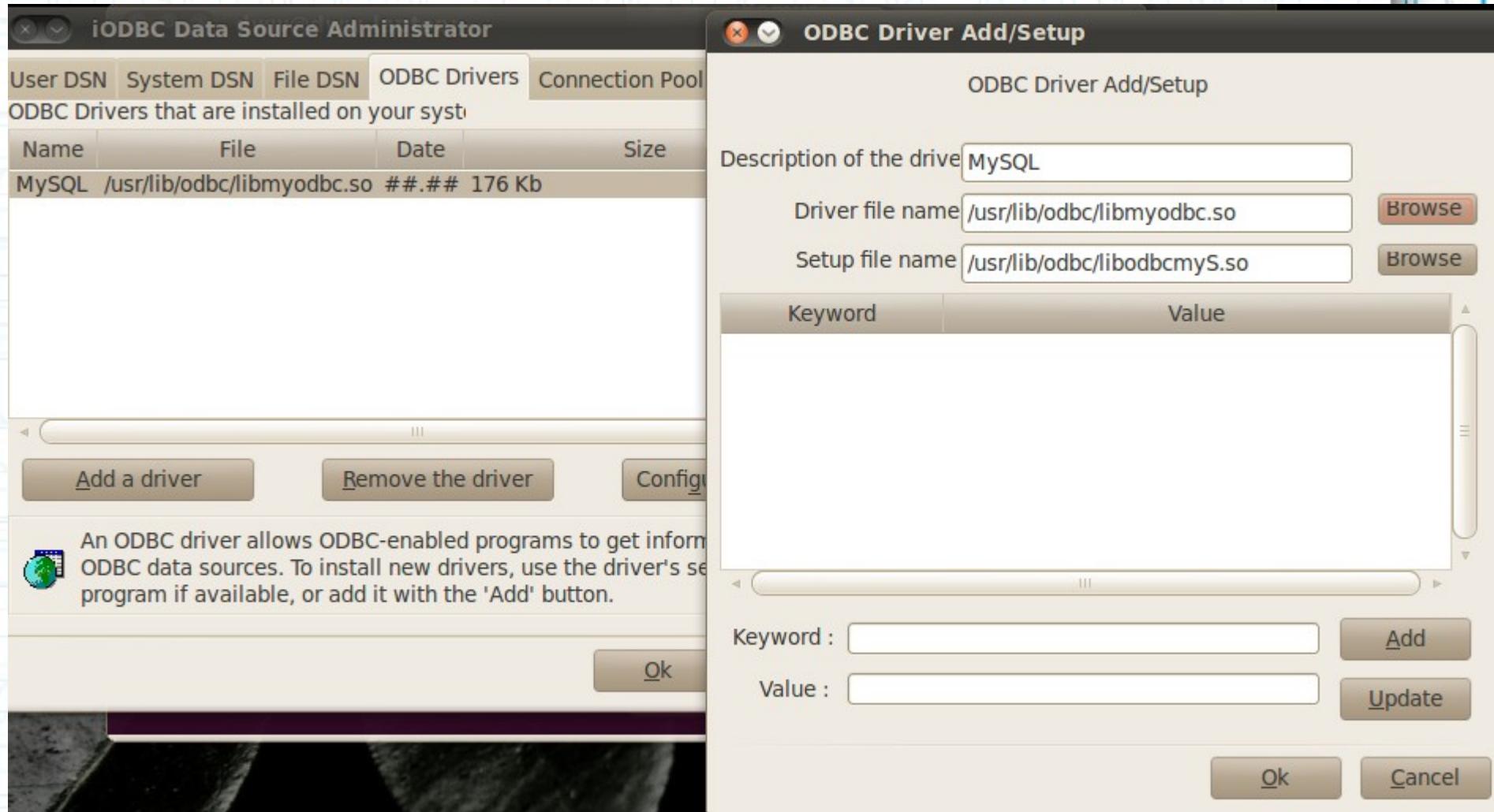
Setup file name /usr/lib/odbc/libodbcmyS.so Browse

Keyword	Value

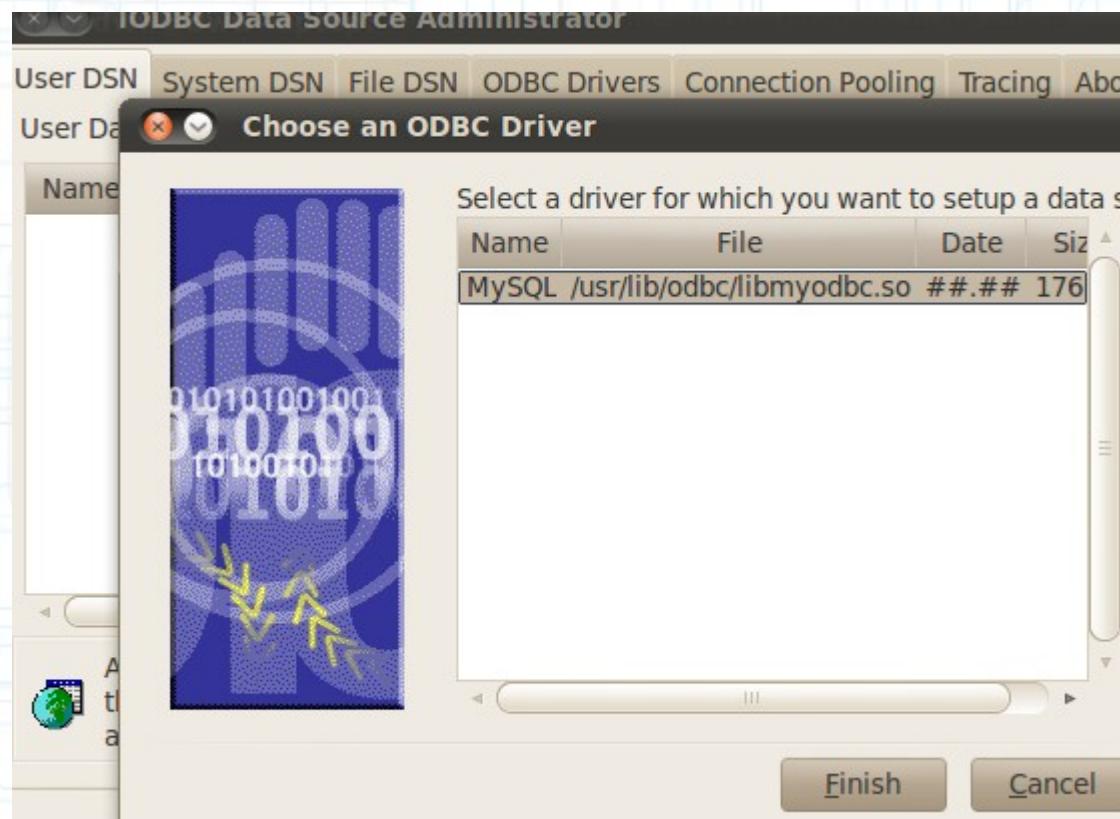
Keyword : Add

Value : Update

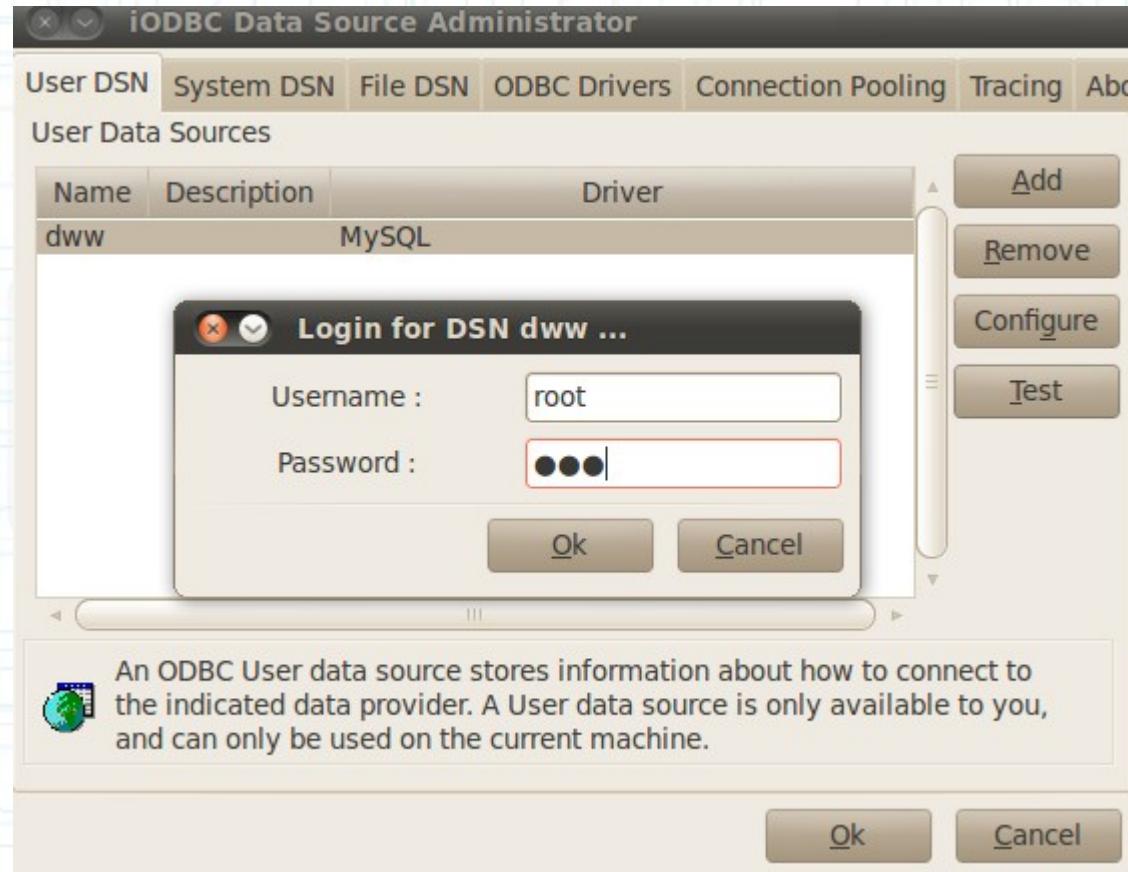
Ok Cancel



Tambahkan user baru DSN



koneksi

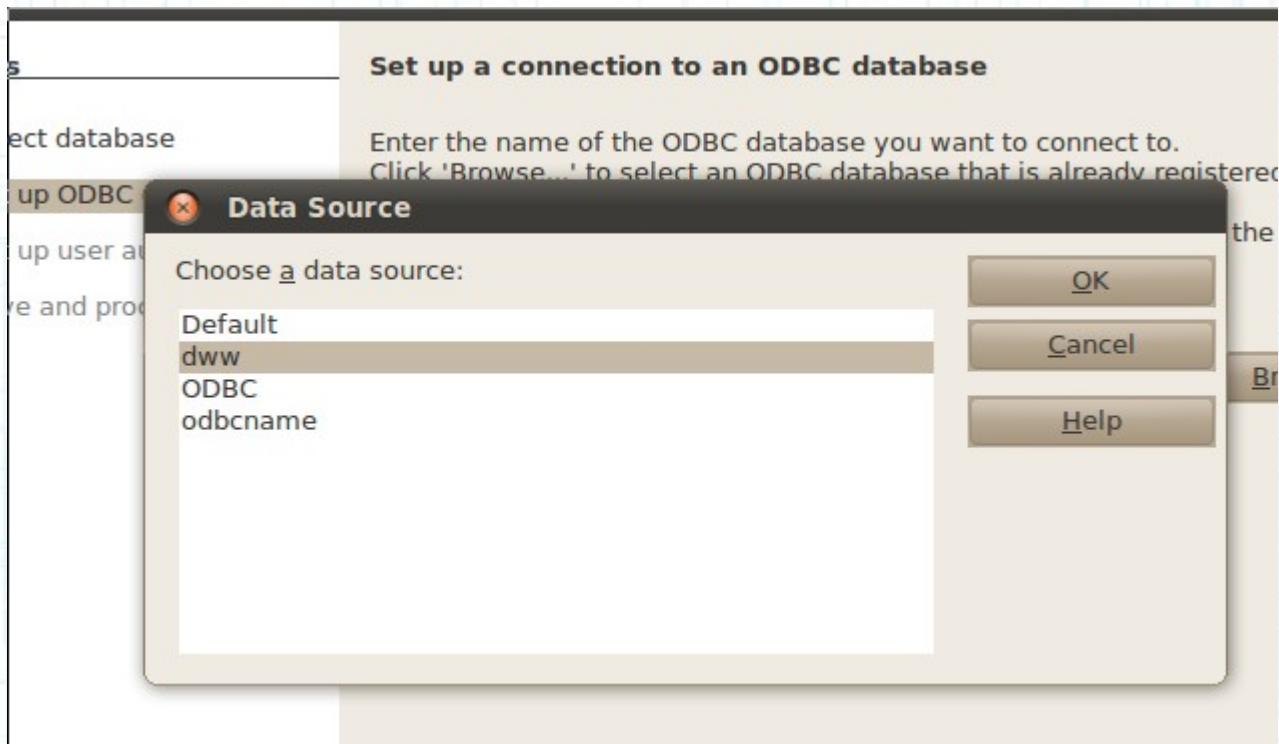


Penggunaan di odbc client

- Oo Database (ODBC Client), pilih koneksi ODBC



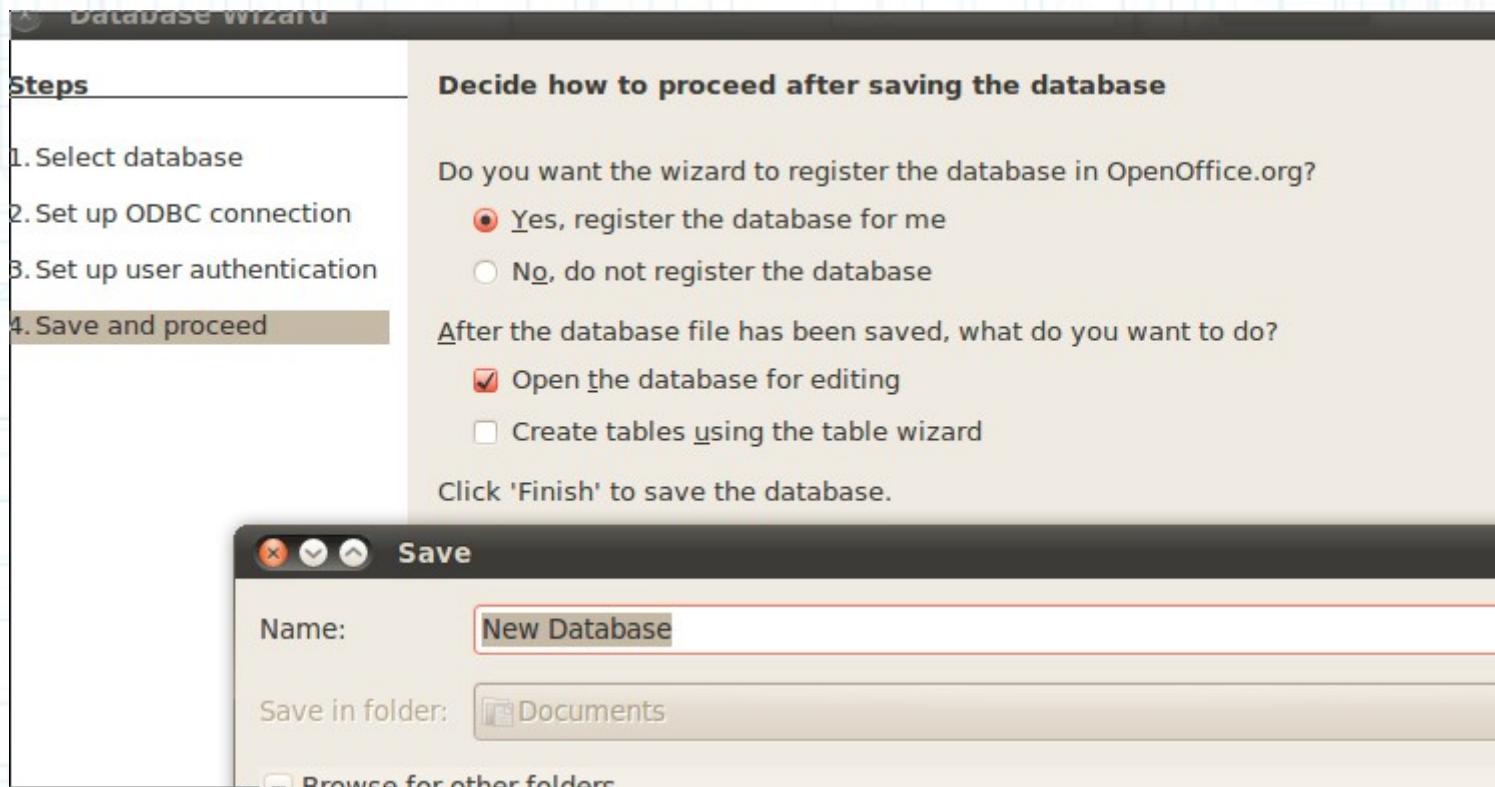
- Pilih koneksi



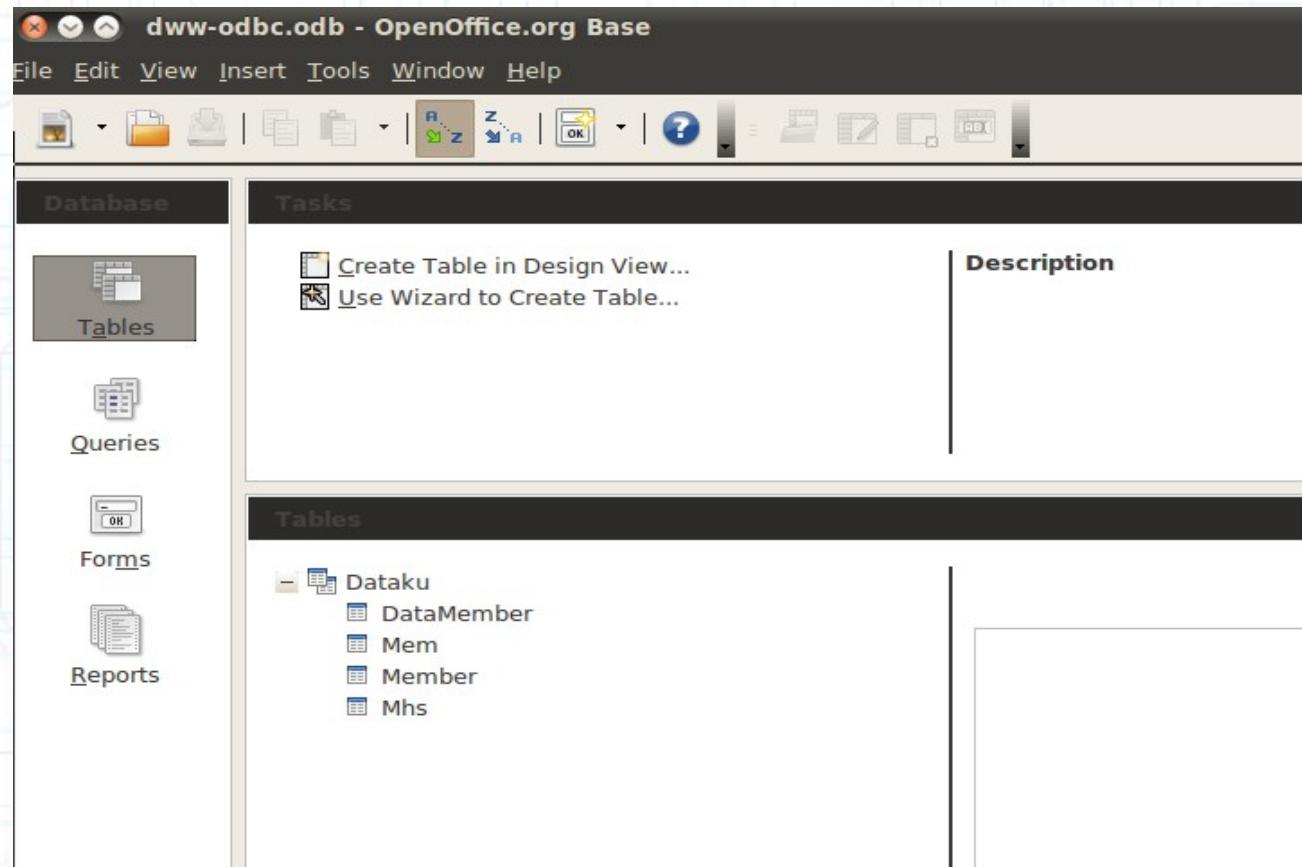
- Log in koneksi



- Buat odbc client



- Buka database ODBC Client yang telah disimpan. Terlihat database serta isinya di server dapat diakses di Oo Database client

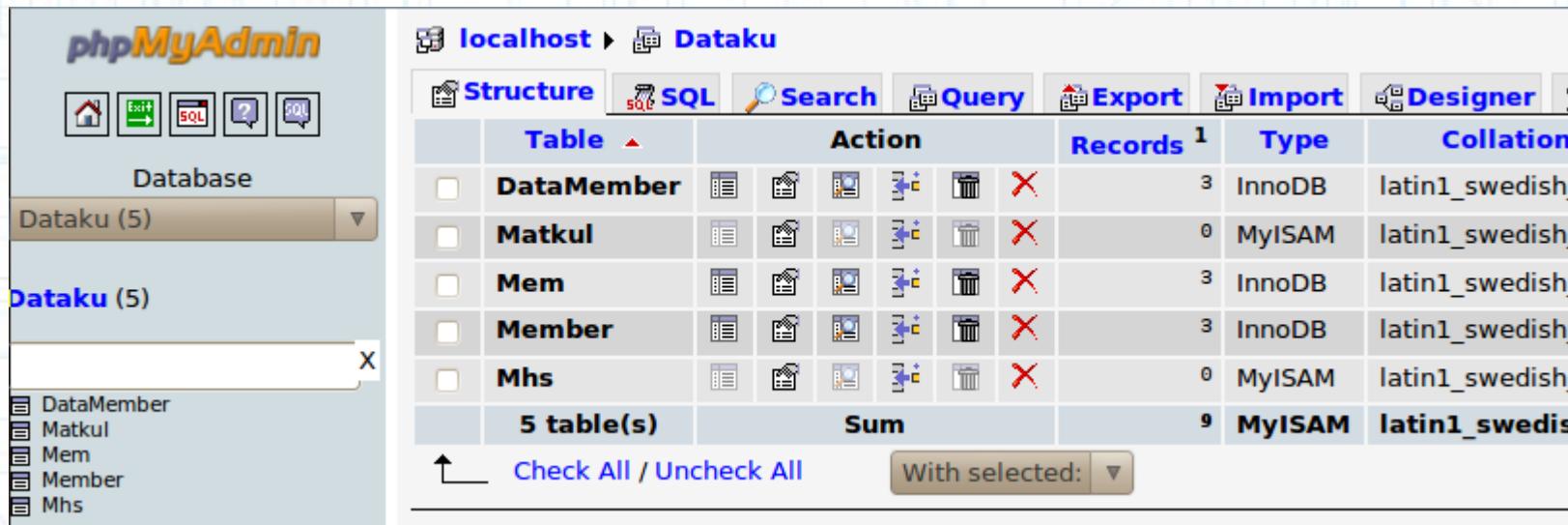


- Buat tabel baru dari odbc client

The screenshot shows the OpenOffice.org Base application interface. On the left, there's a sidebar with icons for Tables, Queries, Forms, and Reports. The main area has a 'Tasks' bar at the top with options like 'Create Table in Design View...' and 'Use Wizard to Create Table...'. Below it, a window titled 'dww-odbc.odb : Table1 - OpenOffice.org Base: Ta' is open, showing a table structure with three fields: Id (Text [varchar]), Matakuliah (Text [varchar]), and Kredit (Integer [int]). To the right of this window, another 'Tables' window is visible, showing a database structure with a 'Dataku' table containing 'DataMember', 'Matkul', 'Mem', 'Member', and 'Mhs' fields.

Field Name	Field Type
Id	Text [varchar]
Matakuliah	Text [varchar]
Kredit	Integer [int]

- tabel baru yang dibuat di ODBC Client terbentuk di MySQL Server



The screenshot shows the phpMyAdmin interface for the 'Dataku' database. The left sidebar lists the database 'Dataku (5)' and its tables: DataMember, Matkul, Mem, Member, and Mhs. The main area displays a table of table structures with columns for Table, Action, Records, Type, and Collation.

Table	Action	Records	Type	Collation
DataMember		3	InnoDB	latin1_swedish
Matkul		0	MyISAM	latin1_swedish
Mem		3	InnoDB	latin1_swedish
Member		3	InnoDB	latin1_swedish
Mhs		0	MyISAM	latin1_swedish
5 table(s)	Sum	9	MyISAM	latin1_swedis

Buttons at the bottom include 'Check All / Uncheck All' and 'With selected: ▾'.

PHP - ODBC

- Contoh koneksi → akses isi dari tabel DataMember dari database Dataku

```
$koneksi= odbc_connect("dww", "root", "dww");
$sql="SELECT * FROM DataMember";
$seek=odbc_exec($koneksi,$sql);
echo "<table border=1><tr>";
echo "<th>Id</th>";
echo "<th>Password</th>";
echo "<th>Address</th></tr>";
while (odbc_fetch_row($seek))
{
    $id=odbc_result($seek,"Id");
    $name=odbc_result($seek,"Name");
    $addr=odbc_result($seek,"Addr");
    echo "<tr><td>$id</td>";
    echo "<td>$name</td>";
    echo "<td>$addr</td></tr>";
}
odbc_close($koneksi);
echo "</table>";
```

<i><u>Id</u></i>	<i><u>Password</u></i>	<i><u>Address</u></i>
abc123	Ana	Jebres
goes*	Viva	Klaten
var999	Vivi	Sukoharjo

- `odbc_connect` → untuk koneksi DSN dari ODBC yang telah dibuat, “dww” adalah nama DSN, “root” adalah nama user dan “dww” kedua adalah password
- `odbc_exec` → untuk eksekusi sintak operasi sql dari ODBC
- `odbc_fetch_row` → mengambil value per row
- `odbc_result` → menyimpan hasil pengambilan data row
- `odbc_close` → menutup koneksi ODBC

- Function untuk ODBC tidak jauh berbeda dengan built-in function pengolah untuk database yang lain.
- Perbedaan besar dari pengolahan ODBC sama seperti database yang lain yaitu sintak SQL nya.
- Kelebihan dari ODBC adalah anda cukup menggunakan built-in function yang sama untuk beragam database (MySQL, MSSQL, Oracle, dll)