

38. PHP Database ODBC

ODBC is an Application Programming Interface (API) that allows you to connect to a data source (e.g. an MS Access database).

38.1. Create an ODBC Connection

With an ODBC connection, you can connect to any database, on any computer in your network, as long as an ODBC connection is available.

Here is how to create an ODBC connection to a MS Access Database:

1. Open the **Administrative Tools** icon in your Control Panel.
2. Double-click on the **Data Sources (ODBC)** icon inside.
3. Choose the **System DSN** tab.
4. Click on **Add** in the System DSN tab.
5. Select the **Microsoft Access Driver**. Click **Finish**.
6. In the next screen, click **Select** to locate the database.
7. Give the database a **Data Source Name (DSN)**.
8. Click **OK**.

Note that this configuration has to be done on the computer where your web site is located. If you are running Internet Information Server (IIS) on your own computer, the instructions above will work, but if your web site is located on a remote server, you have to have physical access to that server, or ask your web host to set up a DSN for you to use.

38.2. Connecting to an ODBC

The `odbc_connect()` function is used to connect to an ODBC data source. The function takes four parameters: the data source name, username, password, and an optional cursor type.

The `odbc_exec()` function is used to execute an SQL statement.

Example

The following example creates a connection to a DSN called northwind, with no username and no password. It then creates an SQL and executes it:

```
$conn=odbc_connect('northwind','','');  
$sql="SELECT * FROM customers";  
$rs=odbc_exec($conn,$sql);
```

38.3. Retrieving Records

The `odbc_fetch_row()` function is used to return records from the result-set. This function returns true if

it is able to return rows, otherwise false.

The function takes two parameters: the ODBC result identifier and an optional row number:

```
odbc_fetch_row($rs)
```

38.4. Retrieving Fields from a Record

The `odbc_result()` function is used to read fields from a record. This function takes two parameters: the ODBC result identifier and a field number or name.

The code line below returns the value of the first field from the record:

```
$compname=odbc_result($rs,1);
```

The code line below returns the value of a field called "CompanyName":

```
$compname=odbc_result($rs,"CompanyName");
```

38.5. Closing an ODBC Connection

The `odbc_close()` function is used to close an ODBC connection.

```
odbc_close($conn);
```

38.6. An ODBC Example

The following example shows how to first create a database connection, then a result-set, and then display the data in an HTML table.

```
<html>
<body>

<?php
$conn=odbc_connect('northwind','','');
if (!$conn)
    {exit("Connection Failed: " . $conn);}
$sql="SELECT * FROM customers";
$rs=odbc_exec($conn,$sql);
if (!$rs)
```

```
        {exit("Error in SQL");}
echo "<table><tr>";
echo "<th>Companyname</th>";
echo "<th>Contactname</th></tr>";
while (odbc_fetch_row($rs))
{
    $compname=odbc_result($rs,"CompanyName");
    $conname=odbc_result($rs,"ContactName");
    echo "<tr><td>$compname</td>";
    echo "<td>$conname</td></tr>";
}
odbc_close($conn);
echo "</table>";
?>

</body>
</html>
```