

Some Useful DB-Accessing PHP Functions

Note: in the example code below, mysqli is used instead of mysql. What is the Difference Between mysql and mysqli?

“mysqli” extension is an improvement over the old “mysql” extension. In fact, the “i” in mysqli stands for “improved”.

mysqli was developed to take advantage of the new features available in MySQL since version 4.1.3. Also, you can use it since PHP 5. So, if you code with PHP5 with a newer version of MySQL, it's strongly recommended for you to use the extension “mysqli” over “mysql”.

Examples from <http://www.w3schools.com/php>

Open a Connection to MySQL

Before we can access data in the MySQL database, we need to be able to connect to the server:

Example (MySQLi Procedural)

```
<?php
$servername = "localhost";
$username = "username";
$password = "password";

// Create connection
$conn = mysqli_connect($servername, $username, $password);

// Check connection
if (!$conn) {
    die("Connection failed: " . mysqli_connect_error());
}
echo "Connected successfully";
?>
```

Query a Database

Prepared Statements in MySQLi

The following example uses prepared statements and bound parameters in MySQLi:

Example (MySQLi with Prepared Statements)

```
<?php
$servername = "localhost";
$username = "username";
$password = "password";
$dbname = "myDB";

// Create connection
$conn = new mysqli($servername, $username, $password, $dbname);

// Check connection
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}

// prepare and bind
$stmt = $conn->prepare("INSERT INTO MyGuests (firstname, lastname,
email) VALUES (?, ?, ?)");
$stmt->bind_param("sss", $firstname, $lastname, $email);

// set parameters and execute
$firstname = "John";
$lastname = "Doe";
$email = "john@example.com";
$stmt->execute();

$firstname = "Mary";
$lastname = "Moe";
$email = "mary@example.com";
$stmt->execute();

$firstname = "Julie";
$lastname = "Dooley";
$email = "julie@example.com";
$stmt->execute();

echo "New records created successfully";
```

```
$stmt->close();  
$conn->close();  
?>
```

Retrieving Data from a Query

PHP `mysqli_fetch_array()` Function

 [PHP MySQLi Reference](#)

Example

Fetch a result row as a numeric array and as an associative array:

```
<?php  
$con=mysqli_connect("localhost","my_user","my_password","my_db");  
// Check connection  
if (mysqli_connect_errno())  
{  
    echo "Failed to connect to MySQL: " . mysqli_connect_error();  
}  
  
$sql="SELECT Lastname, Age FROM Persons ORDER BY Lastname";  
$result=mysqli_query($con,$sql);  
  
// Numeric array  
$row=mysqli_fetch_array($result,MYSQLI_NUM);  
printf ("%s (%s)\n", $row[0], $row[1]);  
  
// Associative array  
$row=mysqli_fetch_array($result,MYSQLI_ASSOC);  
printf ("%s (%s)\n", $row["Lastname"], $row["Age"]);  
  
// Free result set  
mysqli_free_result($result);  
  
mysqli_close($con);  
?>
```

PHP mysqli_num_rows() Function

 [PHP MySQLi Reference](#)

Example

Return the number of rows in a result set:

```
<?php
$con=mysqli_connect("localhost","my_user","my_password","my_db");
// Check connection
if (mysqli_connect_errno())
{
    echo "Failed to connect to MySQL: " . mysqli_connect_error();
}

$sql="SELECT Lastname,Age FROM Persons ORDER BY Lastname";

if ($result=mysqli_query($con,$sql))
{
    // Return the number of rows in result set
    $rowcount=mysqli_num_rows($result);
    printf("Result set has %d rows.\n",$rowcount);
    // Free result set
    mysqli_free_result($result);
}

mysqli_close($con);
?>
```

PHP mysqli_num_fields() Function

 [PHP MySQLi Reference](#)

Example

Return the number of fields (columns) in a result set:

```
<?php
$con=mysqli_connect("localhost","my_user","my_password","my_db");
// Check connection
if (mysqli_connect_errno())
```

```
{
echo "Failed to connect to MySQL: " . mysqli_connect_error();
}

$sql="SELECT Lastname, Age FROM Persons ORDER BY Lastname";

if ($result=mysqli_query($con,$sql))
{
// Return the number of fields in result set
$fieldcount=mysqli_num_fields($result);
printf("Result set has %d fields.\n",$fieldcount);
// Free result set
mysqli_free_result($result);
}

mysqli_close($con);
?>
```