



RUNBOOK — PHP + IIS + MySQL Setup (Windows Server)

1. Install IIS

Server Manager → Add Roles & Features

- Web Server (IIS)
- Application Development → ✓ CGI (IMPORTANT for FastCGI)

Troubleshoot

- If “FastCgiModule” missing → CGI was not installed → enable it.

2. Install PHP

2.1 Download PHP ZIP

From windows.php.net
Choose: **nts, vs16, x64**

2.2 Extract to

C:\php

2.3 Create php.ini

Copy:

php.ini-development → php.ini

2.4 Edit php.ini

Search & update:

```
extension_dir = "C:\php\ext"  
extension=mysqli  
extension=pdo_mysql
```

Troubleshoot

- If mysqli_connect() undefined → mysqli not enabled
- If blank or 500 → install VC++ 2015–2022 runtime.

3. Configure IIS for PHP

3.1 Add Module Mapping

IIS → Server → Handler Mappings → Add Module Mapping

```
Request Path: *.php  
Module: FastCgiModule  
Executable: C:\php\php-cgi.exe  
Name: PHP_via_FastCGI
```

Click **OK** → **Yes**

3.2 FastCGI Settings

Add:

PHPRC = C:\php

Restart IIS

iisreset

Troubleshoot

- If php-cgi.exe not visible → change filter to "All Files".
-

4. Test PHP

Create:

C:\inetpub\wwwroot\info.php

Code:

```
<?php phpinfo(); ?>
```

Open:

http://<IP>/info.php

Should show PHP info.

5. Install MySQL

Download full installer (558 MB).

Setup:

- Server Only
 - Port: 3306
 - Root pass: Pass@123
-

6. Create DB + User

Run in MySQL:

```
CREATE DATABASE webdb;  
CREATE USER 'webuser'@'%' IDENTIFIED BY 'Pass@123';
```

```
GRANT ALL PRIVILEGES ON webdb.* TO 'webuser'@'%';  
FLUSH PRIVILEGES;
```

7. PHP to MySQL Connectivity Test

Create file:

dbtest.php

Code:

```
<?php  
$c = mysqli_connect("localhost","webuser","Pass@123","webdb");  
if(!$c){ die("Connection failed: " . mysqli_connect_error()); }  
echo "Connected Successfully!";  
?>
```

Open:

`http://<IP>/dbtest.php`

Troubleshoot

- “undefined function mysqli” → php.ini wrong
 - “access denied” → wrong MySQL user
 - “cannot connect” → MySQL not running
-

8. Simple Input → Output App

Create:

```
form.php  
<form method="POST">  
  <input type="text" name="mytext">  
  <button>Submit</button>  
</form>  
<?php  
if($_POST){  
  echo "You entered: ".$_POST["mytext"];  
}  
?>
```

9. Full PHP + MySQL Mini-App

Create:

```
app.php
<?php
$conn=mysqli_connect("localhost","webuser","Pass@123","webdb");

if($_SERVER["REQUEST_METHOD"]=="POST"){
    $msg=$_POST["message"];
    mysqli_query($conn,"INSERT INTO messages(user_input) VALUES('$msg')");
}
?>
<form method="POST">
<input type="text" name="message" required>
<button>Save</button>
</form>
<hr>
<h3>Saved Messages:</h3>
<?php
$r=mysqli_query($conn,"SELECT * FROM messages ORDER BY id DESC");
while($row=mysqli_fetch_assoc($r)){
    echo $row['id']." - ".$row['user_input']."<br>";
}
?>
```

10. Database Table

Run:

```
CREATE TABLE messages (
    id INT AUTO_INCREMENT PRIMARY KEY,
    user_input VARCHAR(255),
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);
```

11. Common Troubleshooting

PHP

- 500 error → install VC++ Redistributable
- PHP downloading instead of running → no FastCGI mapping
- mysqli undefined → extension not enabled

MySQL

- Access denied → wrong GRANT
- Timeout → port 3306 blocked
- No changes → wrong database

IIS

- 404 → file not in wwwroot
 - 403 → permissions
 - php-cgi.exe missing → PHP not extracted correctly
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12. DR READY NOTES (Azure Secondary Region)

- Create same VM in Azure region B
- Install IIS + PHP same way
- Install MySQL
- Copy PHP app to region B
- Setup MySQL Replication OR manual dump
- App can run in DR automatically