

What Is PHP Mail?

PHP mail is a function for sending emails with PHP scripts. The built-in PHP function can target multiple recipients per email sending. However, it isn't suitable for bulk emailing without using an external PHP mailing package like PHPMailer

PHP mail() Function

Mail() is a PHP function that uses PHP scripts to send simple emails. The mail function includes three mandatory parameters – **\$to**, **\$subject**, and **\$message**. Optional parameters to utilize include **\$headers** and **\$parameters**.

This built-in PHP function returns a boolean value upon execution – **TRUE** if the server successfully receives the email for sending or **FALSE** on failure.

Advantages:

- Pre-installed and ready to use, all you need is to have PHP.
- Backward-compatible, a **PHP version change** won't break the script.
- Easy to learn.

Disadvantages:

- Hard to set up with SMTP – will trigger recipient spam filters.
- Not suitable for sending a large number of emails.
- The **TRUE** return value doesn't guarantee email delivery.

PHPMailer

PHPMailer is a popular mail-sending library that supports the process via the **mail()** function or through a **Simple Mail Transfer Protocol (SMTP)** server. It gives access to a set of functions for sending mail, simplifying the manual PHP mail configuration process.

Advantages:

- Introduces complex email structures, such as HTML documents and attachments.

- Supports SMTP, and authentication is integrated over **SSL** and **TLS**.
- Can send a lot of emails in a short period.

Disadvantages:

- Requires installation.
- Steep learning curve.

Send Text Email with PHP

The following code sends an email from the script with text message content using PHP.

Use the PHP mail() function and pass the required parameters.

- to – Recipient email address.
- subject – Subject of the email.
- message – Message to be sent.
- headers – From, Cc, Bcc, Content-type headers.

```
<?php
```

```
$to = 'user@example.com';
```

```
$from = 'sender@email.com';
```

```
$fromName = 'Sender_Name';
```

```
$subject = "Send Text Email with PHP";
```

```
$message = "First line of text\nSecond line of text";
```

```
// Additional headers
```

```
$headers = 'From: '.$fromName.'<'.$from.'>';
```

```
// Send email
```

```
if(mail($to, $subject, $message, $headers)){
```

```
    echo 'Email has sent successfully.';
}else{
    echo 'Email sending failed.';
}
?>
```

Send HTML email in PHP

The following code sends an email from the script with HTML message content using PHP.

Use the PHP mail() function and provide the required parameters.

<p>to – Recipient email address.</p> <p>subject – Subject of the email.</p> <p>message – Message to be sent.</p> <p>headers – From, Cc, Bcc, Content-type headers.</p>
--

The content-type header is mandatory for sending HTML formatted email.

The additional headers are used for adding From, Cc, Bcc, etc.

\$htmlContent variable holds the HTML contents of the email.

```
<?php
```

```
$to = 'user@example.com';
```

```
$from = 'sender@example.com';
```

```
$fromName = 'SenderName';
```

```
$subject = "Send HTML Email in PHP ";
```

```
$htmlContent = '
```

```
    <html>
```

```
    <head>
```

```
        <title>Welcome to My Website</title>
```

```
    </head>
```

```
<body>

<h1>Thanks you for joining with us!</h1>

<table cellpadding="0" style="border: 2px dashed #FB4314; width: 100%;">

    <tr>

        <th>Name:</th><td>Ranjesh</td>

    </tr>

    <tr style="background-color: #e0e0e0;">

        <th>Email:</th><td>contact@ranjesh.com</td>

    </tr>

    <tr>

        <th>Website:</th><td><a
href="http://www.ranjesh.com">www.ranjesh.com</a></td>

    </tr>

</table>

</body>

</html>;
```

```
// Set content-type header for sending HTML email

$headers = "MIME-Version: 1.0" . "\r\n";

$headers .= "Content-type:text/html;charset=UTF-8" . "\r\n";
```

```
// Additional headers

$headers .= 'From: '.$fromName.'<'.$from.>' . "\r\n";

$headers .= 'Cc: welcome@example.com' . "\r\n";

$headers .= 'Bcc: welcome2@example.com' . "\r\n";
```

```
// Send email

if(mail($to, $subject, $htmlContent, $headers)){

    echo 'Email has sent successfully.';
```

```
}else{  
    echo 'Email sending failed.';  
}  
?>
```

Send Email with HTML Content from File

If you want to send email with large HTML content, it's always a good idea to separate message content in HTML file. This functionality is very useful when you want to use the dynamic email template for sending mail.

Put the HTML content of the message in an HTML file (email_template.html).

Use file_get_contents() function to retrieve HTML content from the file.

```
// Get HTML contents from file  
$htmlContent = file_get_contents("email_template.html");
```

Send Email Using Form Data

```
<?php  
if(isset($_POST['email'])) {  
    $email_to = "test@gmail.com";  
    $email_subject = "Summarized propose of the email";  
    //Errors to show if there is a problem in form fields.  
    function died($error) {  
        echo "We are sorry that we can proceed your request due to error(s)";  
        echo "Below is the error(s) list <br /><br />";  
        echo $error."<br /><br />";  
        echo "Please go back and fix these errors.<br /><br />";  
        die();  
    }  
}
```

```

// validation expected data exists
if(!isset($_POST['first_name']) ||
    !isset($_POST['last_name']) ||
    !isset($_POST['email']) ||
    !isset($_POST['telephone']) ||
    !isset($_POST['comments'])) {
    died('We are sorry to proceed your request due to error within form entries');
}

$first_name = $_POST['first_name']; // required
$last_name = $_POST['last_name']; // required
$email_from = $_POST['email']; // required
    $telephone = $_POST['telephone']; // not required
$comments = $_POST['comments']; // required
$error_message = "";
$email_exp = '/^[A-Za-z0-9._%~]+@[A-Za-z0-9.-]+\.[A-Za-z]{2,4}$/';
if(!preg_match($email_exp,$email_from)) {
    $error_message .= 'You entered an invalid email<br />';
}
$string_exp = "/^[A-Za-z .'-]+$/";
if(!preg_match($string_exp,$first_name)) {
    $error_message .= 'Invalid first name<br />';
}

if(!preg_match($string_exp,$last_name)) {
    $error_message .= 'Invalid Last name<br />';
}

```

```

if(strlen($comments) < 2) {
    $error_message .= 'Invalid comments<br />';
}
if(strlen($error_message) > 0) {
    died($error_message);
}
$email_message = "Form details below.\n\n";
function clean_string($string) {
    $bad = array("content-type","bcc:","to:","cc:","href");
    return str_replace($bad,"",$string);
}
$email_message .= "First Name: ".clean_string($first_name)."\n";
$email_message .= "Last Name: ".clean_string($last_name)."\n";
$email_message .= "Email: ".clean_string($email_from)."\n";
$email_message .= "Telephone: ".clean_string($telephone)."\n";
$email_message .= "Comments: ".clean_string($comments)."\n";
// create email headers
$headers = 'From: '.$email_from."\r\n".
'Reply-To: '.$email_from."\r\n" .
'X-Mailer: PHP/' . phpversion();
@mail($email_to, $email_subject, $email_message, $headers);
?>
<!-- include your own success html here -->
Thank you for contacting us. We will be in touch with you very soon.
<?php
}
?>
<form name="contactform" method="post" action="">

```

```
<table width="450px">

<tr>

<td valign="top">

<label for="first_name">First Name *</label>

</td>

<td valign="top">

<input type="text" name="first_name" maxlength="50" size="30">

</td>

</tr>

<tr>

<td valign="top">

<label for="last_name">Last Name *</label>

</td>

<td valign="top">

<input type="text" name="last_name" maxlength="50" size="30">

</td>

</tr>

<tr>

<td valign="top">

<label for="email">Email Address *</label>

</td>

<td valign="top">

<input type="text" name="email" maxlength="80" size="30">

</td>

</tr>

<tr>

<td valign="top">

<label for="telephone">Telephone Number</label>
```



```

</td>
<td valign="top">
    <input type="text" name="telephone" maxlength="30" size="30">
</td>
</tr>
<tr>
<td valign="top">
    <label for="comments">Comments *</label>
</td>
<td valign="top">
    <textarea name="comments" maxlength="1000" cols="25" rows="6"></textarea>
</td>
</tr>
<tr>
<td colspan="2" style="text-align:center">
    <input type="submit" value="Submit"> </a>
</td>
</tr>
</table>
</form>

```

Sending Email PHPMailer => mailtrap

To Test email: Please create account at <http://www.mailtrap.io>

```

<?php
use PHPMailer\PHPMailer\PHPMailer;

```

```
use PHPMailer\PHPMailer\Exception;

require 'vendor/autoload.php';

$errors = [];

$errorMessage = "";

$successMessage = "";

$siteKey = ""; // reCAPTCHA site key

$secret = ""; // reCAPTCHA secret key

if ($_SERVER['REQUEST_METHOD'] === 'POST') {

    $name = sanitizeInput($_POST['name']);

    $email = sanitizeInput($_POST['email']);

    $message = sanitizeInput($_POST['message']);

    if (empty($name)) {

        $errors[] = 'Name is empty';

    }

    if (empty($email)) {

        $errors[] = 'Email is empty';

    } else if (!filter_var($email, FILTER_VALIDATE_EMAIL)) {

        $errors[] = 'Email is invalid';

    }

    if (empty($message)) {

        $errors[] = 'Message is empty';

    }

}

if (!empty($errors)) {

    $allErrors = join('<br/>', $errors);

    $errorMessage = "<p style='color: red;'>{ $allErrors }</p>";

} else {

    $toEmail = test@gmail.com';
```

```

$emailSubject = 'New email from your contact form';

// Create a new PHPMailer instance
$mail = new PHPMailer(true);

try {
    // Configure the PHPMailer instance
    $mail->isSMTP();
    $mail->Host = 'sandbox.smtp.mailtrap.io';
    $mail->SMTPAuth = true;
    $mail->Username = '01c87ee6acc466';
    $mail->Password = 'f1bb86e1ffb7dc';
    $mail->SMTPSecure = PHPMailer::ENCRYPTION_STARTTLS;
    $mail->Port = 587;

    // Set the sender, recipient, subject, and body of the message
    $mail->setFrom($email);
    $mail->addAddress($toEmail);
    $mail->Subject = $emailSubject;
    $mail->isHTML(true);
    $mail->Body = "<p>Name: {$name}</p><p>Email: {$email}</p><p>Message:
{$message}</p>";

    // Send the message
    $mail->send();

    $successMessage = "<p style='color: green;'>Thank you for contacting us :)</p>";
} catch (Exception $e) {
    $errorMessage = "<p style='color: red;'>Oops, something went wrong. Please try again
later</p>";
}

```

```

    }
}
}
function sanitizeInput($input) {
    $input = trim($input);
    $input = stripslashes($input);
    $input = htmlspecialchars($input, ENT_QUOTES, 'UTF-8');
    return $input;
}
?>
<html>
<body>

<form action="" method="post" id="contact-form">
    <h2>Contact us</h2>
    <?php echo(!empty($errorMessage)) ? $errorMessage : ">
    <?php echo(!empty($successMessage)) ? $successMessage : ">
    <p>
        <label>First Name:</label>
        <input name="name" type="text" required />
    </p>
    <p>
        <label>Email Address:</label>
        <input style="cursor: pointer;" name="email" type="email" required />
    </p>
    <p>
        <label>Message:</label>
        <textarea name="message" required></textarea>

```

</p>

<p>

<button type="submit" >

Submit

</button>

</p>

</form>

</body>

</html>