

# PHP - Append File

In PHP, the `fopen()` function returns the file pointer of a file used in different opening modes such as "w" for write mode, "r" read mode and "r+" or "r+" mode for simultaneous read/write operation, and "a" mode that stands for append mode.

When a file is opened with "w" mode parameter, it always opens a new file. It means that if the file already exists, its content will be lost. The subsequent `fwrite()` function will put the data at the starting position of the file.

Assuming that a file "new.txt" is present with the following contents –

```
Hello World
TutorialsPoint
PHP Tutorial
```

The following statement –

```
$fp = fopen("new.txt", "w");
```

Erases all the existing data before new contents are written.

## Read/Write Mode

Obviously, it is not possible to add new data if the file is opened with "r" mode. However, "r+" or "w+" mod opens the file in "r/w" mode, but still a `fwrite()` statement immediately after opening a file will overwrite the contents.

## Example

Take a look at the following code –

```
<?php
    $fp = fopen("new.txt", "r+");
    fwrite($fp, "PHP-MySQL Tutorial\n");
    fclose($fp);
?>
```

With this code, the contents of the "new.txt" file will now become –



PHP-MySQL Tutorial  
IsPoint  
PHP Tutorial

To ensure that the new content is added at the end of the existing file, we need to manually put the file pointer to the end, before write operation. (The initial file pointer position is at the 0th byte)

## The fseek() Function

PHP's fseek() function makes it possible to place the file pointer anywhere you want –

```
fseek(resource $stream, int $offset, int $whence = SEEK_SET): int
```

The **\$whence** parameter is from where the offset is counted. Its values are –

- **SEEK\_SET** – Set position equal to offset bytes.
- **SEEK\_CUR** – Set position to current location plus offset.
- **SEEK\_END** – Set position to end-of-file plus offset.

## Example

So, we need to move the pointer to the end with the fseek() function as in the following code which adds the new content to the end.

```
<?php
    $fp = fopen("new.txt", "r+");
    fseek($fp, 0, SEEK_END);
    fwrite($fp, "\nPHP-MySQL Tutorial\n");
    fclose($fp);
?>
```

Now check the contents of "new.txt". It will have the following text –

Hello World  
TutorialsPoint  
PHP Tutorial  
PHP-MySQL Tutorial

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## Append Mode

Instead of manually moving the pointer to the end, the "a" parameter in `fopen()` function opens the file in append mode. Each `fwrite()` statement adds the content at the end of the existing contents, by automatically moving the pointer to `SEEK_END` position.

```
<?php
    $fp = fopen("new.txt", "a");
    fwrite($fp, "\nPHP-MySQL Tutorial\n");
    fclose($fp);
?>
```

One of the allowed modes for `fopen()` function is "r+" mode, with which the file performs read/append operation. To read data from any position, you can place the pointer to the desired byte by `fseek()`. But, every `fwrite()` operation writes new content at the end only.

## Example

In the program below, the file is opened in "a+" mode. To read the first line, we shift the file position to 0 the position from beginning. However, the `fwrite()` statement still adds new content to the end and doesn't overwrite the following line as it would have if the opening mode "r+" mode.

```
<?php
    $fp = fopen("new.txt", "a+");
    fseek($fp, 0, SEEK_SET);
    $data = fread($fp, 12);
    echo $data;
    fwrite($fp, "PHP-File Handling");
    fclose ($fp);
?>
```

Thus, we can append data to an existing file if it is opened in "r+/w+" mode or "a/a+" mode