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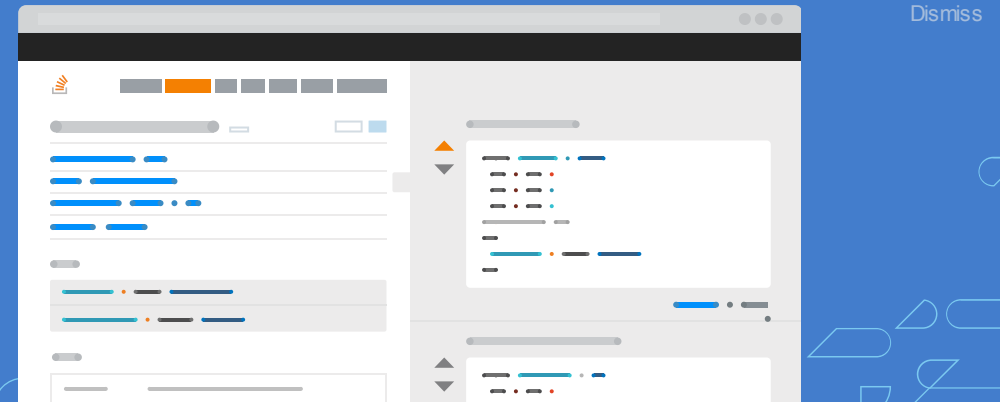
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How to extract a file extension in PHP?



asked 7 years ago
viewed 311911 times
active 2 months ago

442



143

This is a question you can read everywhere on the web with various answers :

```
$ext = end(explode('.', $filename));
$ext = substr(strchr($filename, '.'), 1);
$ext = substr($filename, strpos($filename, '.') + 1);
$ext = preg_replace('/^.*\.([^.]+)$/D', '$1', $filename);

$exts = split("/[\\.]", $filename);
$n     = count($exts)-1;
$ext   = $exts[$n];
```

etc.

Linked

272

[How to get the file extension in PHP?](#)

19

[Get extension from filename like variable](#)

1

[php - check whether string end with image extension](#)

However, there is always "the best way" and it should be on stackoverflow.

php file-extension

share improve this question

edited May 23 '14 at 9:46



Vaidas

500 5 20

asked Oct 6 '08 at 11:00



e-satis

242k 82 229 286

9 Source of question and answer: cowburn.info/2008/01/13/get-file-extension-comparison – [salathe](#) Mar 26 '11 at 13:37

2 One more way to get ext is `strchr($filename, '.')`; – [verybadbug](#) Sep 30 '13 at 5:06

add a comment

19 Answers

active

oldest

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1206

People from other scripting languages always think theirs is better because they have a built in function to do that and not PHP (I am looking at pythonistas right now :-)).

In fact, it does exist, but few people know it. Meet `pathinfo()`:

```
$ext = pathinfo($filename, PATHINFO_EXTENSION);
```

This is fast, efficient, reliable and built-in. `pathinfo()` can give you other information, such as canonical path, depending on the constant you pass to it.

Enjoy

share improve this answer

edited Jan 27 '14 at 10:10



nu6A

2,747 1 16 41

answered Oct 6 '08 at 11:03



e-satis

242k 82 229 286

33 I wish I could vote this up twice. I can't tell you how much code I've been able to replace using `pathinfo` –

4

What's the best way/practice to get the extension of a uploaded file in PHP

0

PHP Upload image with md5 name

1

How to get the file extension?

-1

substring from last match in php?

-1

How to extract part of the path and the ending file name with Regex?

0

Is there a way to make this function better?

0

PHP file extension issue

[see more linked questions...](#)

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Mark Biek Oct 23 '08 at 17:20

4 So do I. That's why I put it here ! – e-satis Oct 29 '08 at 19:26

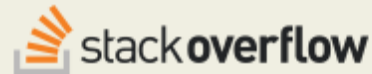
4 Whaddaya know, turns out there is a best way. – Ben Dec 23 '10 at 3:40

12 @khizaransari You should look for another hosting provider, the one you got is stupid. Really, I mean it. There is *no reason whatsoever* to disable this function. Tell them that. As a workaround: `function get_ext($fname){ return substr($fname, strrpos($fname, ".") + 1); }` Make sure the file has an extension though, it may do anything when you pass a path as argument! – Luc Sep 20 '12 at 17:29

5 my idea of PHP compared to python changed completely now that I know about this function :O – Tommaso Barbugli Jul 2 '14 at 10:22

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`pathinfo()`

105

An example...



```
$path_info = pathinfo('/foo/bar/baz.bill');  
echo $path_info['extension']; // "bill"
```

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edited Jan 27 '14 at 10:12



nu6A

2,747 1 16 41

answered Oct 6 '08 at 11:02



Adam Wright

39.3k 8 100 137

2 This one is "the best way" – vaske Oct 6 '08 at 11:04

9 Since PHP 5.5 -> `echo pathinfo('/foo/bar/baz.bill')['extension'];` – Salman A Sep 13 '14 at 12:18

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38

There is also `SplFileInfo`:

```
$file = new SplFileInfo($path);
$ext  = $file->getExtension();
```

Often you can write better code if you pass such an object around instead of a string, your code is more speaking then. Since PHP 5.4 this is a one-liner:

```
$ext = (new SplFileInfo($path))->getExtension();
```

share improve this answer

answered Oct 17 '12 at 10:32



hakre

131k 25 203 369

7 Nice to see my code being used. :) – [salathe](#) Oct 24 '12 at 19:44

1 @salathe: Yes, good code :) Thank you for doing all that. – [hakre](#) Feb 9 '13 at 10:16

Fantastic, Its Objects all the way down :) – [Christopher Chase](#) Jun 26 '13 at 15:12

2 Please be aware that `->getExtension()` is available in `SplFileInfo` since PHP 5.3.6. – [matthias](#) Aug 26 '14 at 12:02

1 @matthias: Please be aware that SPL can be disabled in PHP versions that predate the PHP 5.3.0 release. If you're still not running PHP 5.3 but 5.2 or lower, this answer most likely did not fit for stable code. Otherwise you can stabilize your code by requiring a specific PHP version and otherwise bail out. – [hakre](#) Aug 26 '14 at 12:24

[show 2 more comments](#)

20

Here is DEBUG:

PARSE_URL ([documentation](#))

```
$x = parse_url('http://example.com/myfolder/sympony.mp3?aa=1&bb=2?cc=#gggg');
$x['scheme'] => 'http'
$x['host']   => 'example.com'
$x['path']   => '/myfolder/sympony.mp3'
$x['query']  => 'aa=1&bb=2?cc='
```

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- Can you feel the fire?
- Why are we scared of singularities?
- I jump high or low?
- Running an API, if I correct a content-type header will that break things for customers?
- Conquering a Metropolis with near-zero own casualties
- What is the story of Rameshwaram Jyotirlinga?
- Novel or novelette in which brilliant young girl has trouble with teaching machine that forces the user to absorb material very quickly

```
$x['fragment'] => 'gggg'
```

PATHINFO (documentation)

```
$x = pathinfo('http://example.com/myfolder/sympony.mp3?aa=1&bb=2?cc=#gggg');  
$x['dirname']      => 'http://example.com/myfolder'  
$x['basename']     => 'sympony.mp3?aa=1&bb=2?cc=#gggg'  
$x['extension']    => 'mp3?aa=1&bb=2?cc=#gggg'  
$x['filename']     => 'sympony'
```

other things:

```
dirname(parse_url($url)['path']) ----> /myfolder  
basename(parse_url($url))           ----> sympony.mp3  
pathinfo(parse_url($url)['path'], PATHINFO_EXTENSION) ----> mp3
```

share improve this answer

edited Jul 20 '15 at 7:42

answered Jul 17 '15 at 12:39



tazo todia

12.3k 6 60 58

1 This answer covers everything eg. a file like `foo_folder/foo-file.jpg?1345838509` will fail miserably with just `pathinfo`, thanx – user1299518 Jul 20 '15 at 6:46

Not completely on-topic, but it sure did solve my problem! – Howie Nov 24 '15 at 6:48

add a comment



17



This is the best way:

```
$filename = 'hello.txt';  
$ext = pathinfo($filename, PATHINFO_EXTENSION);  
echo $ext;
```

The above code print txt

share improve this answer

answered Jan 29 '14 at 21:48



Gabriele F.

486 4 7

add a comment



12



E-satis response is the correct way to determine the file extension.

Alternatively, instead of relying on a files extension, you could use the fileinfo (<http://us2.php.net/fileinfo>) to determine the files MIME type.

Here's a simplified example of processing an image uploaded by a user:

```
// Code assumes necessary extensions are installed and a successful file upload has occurred

// Create a FileInfo object
$finfo = new FileInfo(null, '/path/to/magic/file');

// Determine the MIME type of the uploaded file
switch ($finfo->file($_FILES['image']['tmp_name'], FILEINFO_MIME) {
    case 'image/jpeg':
        $im = imagecreatefromjpeg($_FILES['image']['tmp_name']);
        break;

    case 'image/png':
        $im = imagecreatefrompng($_FILES['image']['tmp_name']);
        break;

    case 'image/gif':
        $im = imagecreatefromgif($_FILES['image']['tmp_name']);
        break;
}
```

share improve this answer

edited Oct 14 '10 at 13:31



e-satis

242k 82 229 286

answered Oct 6 '08 at 14:23



Toxygene


322 2 10

This is the ONLY correct answer. I don't understand why people voted-up others. Yes, this approach demands more efforts from developer but it boosts performance(although little, but it does). Please refer [this](#). –

1 @Bhavik : In some cases we may only need the file extension, they about the mime type check. But the actual question is about file extension, not file type. So this is NOT the best answer for this question. (yet an answer) – [Sasi varna kumar](#) Oct 23 '15 at 8:25

this switch need an extra parenthesis – [rsb2097](#) Feb 17 at 18:42

[add a comment](#)

 1) If you are using (PHP 5 >= 5.3.6) you can use [SplFileInfo::getExtension](#) — Gets the file extension

9

 Example code

```
<?php

$info = new SplFileInfo('test.png');
var_dump($info->getExtension());

$info = new SplFileInfo('test.tar.gz');
var_dump($info->getExtension());

?>
```

This will output

```
string(3) "png"
string(2) "gz"
```

2) Another way of getting the extension if you are using (PHP 4 >= 4.0.3, PHP 5) is [pathinfo](#)

Example code

```
<?php

$ext = pathinfo('test.png', PATHINFO_EXTENSION);
var_dump($ext);

$ext = pathinfo('test.tar.gz', PATHINFO_EXTENSION);
var_dump($ext);

?>
```

This will output

```
string(3) "png"
string(2) "gz"
```

// EDIT: removed a bracket

share improve this answer

edited Nov 25 '14 at 13:09

answered Aug 2 '14 at 7:52



nils

1,251 7 14



Subodh Ghulaxe

8,057 5 51 77

add a comment



7



Sometimes it's useful to not to use `pathinfo($path, PATHINFO_EXTENSION)` , for example:

```
$path = '/path/to/file.tar.gz';

echo ltrim(strstr($path, '.'), '.'); // tar.gz
echo pathinfo($path, PATHINFO_EXTENSION); // gz
```

Also note that `pathinfo` fails to handle some non-ASCII characters (usually it just suppresses them from the output), in extensions that usually isn't a problem but it doesn't hurt to be aware of that caveat.

share improve this answer

answered Nov 1 '12 at 18:11



Alix Axel

85.7k 56 291 404

+1 but it a grey area. Is tar.gz the extension, or .gz ? – [e-satis](#) Nov 1 '12 at 21:21

5 @e-satis: According to [Wikipedia](#) they are two extensions: *The UNIX-like filesystems use a different model without the segregated extension metadata. The dot character is just another character in the main filename, and filenames can have multiple extensions, usually representing nested transformations, such as files.tar.gz.* – [Alix Axel](#) Nov 1 '12 at 23:29

1 And if we have dot in the product name? Ex : `test.19-02-2014.jpeg` – [Mario Johnathan](#) Mar 26 '14 at 14:05

[add a comment](#)

5



The simplest way to get file extension in php is to use php built-in function [pathinfo](#).

```
$file_ext = pathinfo('your_file_name_here', PATHINFO_EXTENSION);  
echo ($file_ext); // the out should be extension of file eg:-png, gif, html
```

[share](#) [improve this answer](#)

answered May 13 '15 at 6:44



[Shahbaz](#)

1,826 1 9 28

[add a comment](#)

2



As long as it does not contain path you can also use:

```
array_pop(explode('.', $fname))
```

Where `$fname` is a name of the file, for example: `my_picture.jpg` And the outcome would be:
`jpg`

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[edited Aug 11 '12 at 12:49](#)

answered Aug 11 '12 at 12:42



[Anonymous](#)

1,780 3 23 59

@Why this have 3 downvotes? its giving proper result. Please explain – [railsbox](#) May 22 '14 at 6:23

It's not wrong, it's just not the best way to do it. Upvoted for a bit of balance. – [Maxwell's Demon](#) Jul 15 '14 at 1:52

This is the best way, when you need the real extension and filename may have multiple .s in it, like user uploaded photos in my case. – [Rauli Rajande](#) Jul 21 '14 at 15:35

1 This fails if the filename has no extension. Try passing in "myfile" and it will return "myfile". The correct return value is an empty string as the extension in this use case. – [pmont](#) Dec 5 '14 at 17:25

This is wrong in that `array_pop()` will throw a notice because it takes a pointer as its parameter. – [jurchiks](#) Jul 31 '15 at 12:50

[add a comment](#)



This will work

```
$ext = pathinfo($filename, PATHINFO_EXTENSION);
```



[share](#) [improve this answer](#)

answered Jan 15 '15 at 10:12



[Deepika Patel](#)

445 5 9

This has already been answered much better by Subodh back in August. – [Nisse Engström](#) Jan 15 '15 at 12:18

[add a comment](#)



Here is a example, suppose \$filename is "example.txt"

```
$ext = substr($filename, strrpos($filename, '.', -1), strlen($filename));
```



So \$ext will be ".txt"

[share](#) [improve this answer](#)

answered Feb 25 '15 at 23:22



[G. I. Joe](#)

175 8

[add a comment](#)



A quick fix would be something like this.

```
//exploding the file based on . operator
$file_ext = explode('.', $filename);

//count taken (if more than one . exist; files like abc.fff.2013.pdf
$file_ext_count=count($file_ext);
```

```
//minus 1 to make the offset correct
$cnt=$file_ext_count-1;

// the variable will have a value pdf as per the sample file name mentioned ab

$file_extension= $file_ext[$cnt];
```

share improve this answer

answered May 26 '15 at 9:29



Amelia Earheart

331 1 14

Why not just to use php built in function for the purpose php.net/manual/en/function.pathinfo.php instead of using long code – [Shahbaz](#) Jul 1 '15 at 5:40

1 Besides Shahbaz's point you can also just do `$file_ext = end(explode('.', $filename));` to do everything in this answer in a single line instead of four. – [turibe](#) Jan 7 at 2:49

@Amelia What if you have `.tar.gz`. It will not work, so if you need to get full of extension use such as `ltrim(strstr($filename, '.'), '.');` to get full of extension instead uncorrectly as `gz`. – [Marin Sagovac](#) May 21 at 20:00

add a comment



1



```
substr($path, strrpos($path, '.') + 1);
```

share improve this answer

answered Dec 5 '13 at 11:13



Kurt Zhong

2,898 1 9 13

add a comment



1



I found that the `pathinfo()` and `SplFileInfo` solutions works well for standard files on the local file system, but you can run into difficulties if you're working with remote files as URLs for valid images may have a `#` (fragment identifiers) and/or `?` (query parameters) at the end of the URL, which both those solutions will (incorrect) treat as part of the file extension.

I found this was a reliable way to use `pathinfo()` on a URL after first parsing it to strip out the unnecessary clutter after the file extension:

```
$url_components = parse_url($url); // First parse the URL
$url_path = $url_components['path']; // Then get the path component
$ext = pathinfo($url_path, PATHINFO_EXTENSION); // Then use pathinfo()
```

[share](#) [improve this answer](#)

answered Jan 20 '15 at 20:40



Jonathan Ellis

2,551 1 19 34

[add a comment](#)



1



`pathinfo` is array. We can check **directory name,file name,extension** etc

```
$path_parts = pathinfo('test.png');

echo $path_parts['extension'], "\n";
echo $path_parts['dirname'], "\n";
echo $path_parts['basename'], "\n";
echo $path_parts['filename'], "\n";
```

[share](#) [improve this answer](#)

answered Jun 3 at 4:43



Arshid KV

1,952 10 20

[add a comment](#)



0



You can get all file extension on particular folder and do operation with specific file extention

```
<?php
$files=glob("abc/*."); //abc is folder all files inside folder
//print_r($files);
//echo count($files);
for($i=0;$i<count($files);$i++){
    $extension = pathinfo($files[$i], PATHINFO_EXTENSION);
    $ext[]=$extension;
}
```

```
//do operation for perticular extenstion type
if($extension=='html'){
    //do operation
}
endfor;
print_r($ext);
?>
```

share improve this answer

answered May 4 at 5:35



Samir Karmacharya

447 14

add a comment



0

you can try also this :

```
pathinfo(basename( $_FILES["fileToUpload"]["name"]),PATHINFO_EXTENSION)
```



share improve this answer

answered May 24 at 9:53



smile 22121

40 9

add a comment



-2

Use

```
str_replace('.', '', strrchr($file_name, '.'))
```



for a quick extension retrieval (if you know for sure your file name has one).

share improve this answer

answered Nov 28 '12 at 12:05



AlexB

123 1 1

add a comment

protected by [Ashwini Chaudhary](#) Jul 6 '13 at 21:04

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