

# Files and Web Services

---



**Michael Van Sickle**

AUTHOR

@vansimke



# Introduction



**Sending Files**

**Receiving Files**

**Security Considerations**



# Receiving Files

**POST requests**

**PUT requests**



# Submitting Single POSTed Files

```
<form method="POST" action="__URL__" enctype="multipart/form-data">  
    <input type="file" name="myFile">  
    <button type="submit">Submit</button>  
</form>
```



# Receiving Single POSTed File

```
<?php

$fileInfo = $_FILES['myFile'];           // use $_FILES superglobal to access file info

$name = $_FILES['myFile'] ['name'];      // name attribute of the associated form tag

$type = $_FILES['myFile'] ['type'];      // MIME type of the file

$path = $_FILES['myFile'] ['tmp_name'];  // path to uploaded file on server

$size = $_FILES['myFile'] ['size'];      // size of uploaded file

$error = $_FILES['myFile'] ['error'];    // numeric error code
```

<https://www.php.net/manual/en/features.file-upload.errors.php>

```
?>
```



# Receiving Single POSTed File

```
<?php

$filename = $_FILES['myFile']['tmp_name'];

echo is_uploaded_file($filename);           // TRUE is $filename was uploaded with POST

echo move_uploaded_file($filename, '/some/path');

                                           // TRUE if POSTed file moved successfully

?>
```



# Submitting Multiple POSTed Files

```
<form method="POST" action="__URL__" enctype="multipart/form-data">
```

```
  <input type="file" name="myFiles[]" >
```

```
  <input type="file" name="myFiles[]" >
```

```
  <input type="file" name="myFiles[]" >
```

```
  <button type="submit">Submit</button>
```

```
</form>
```



# Submitting Multiple POSTed Files

```
<form method="POST" action="__URL__" enctype="multipart/form-data">  
    <input type="file" name="myFiles[]" multiple>  
    <button type="submit">Submit</button>  
</form>
```





# Receiving Multiple POSTed File

```
<?php
    $fileInfo = $_FILES['myFiles'];           // access uploaded files
    $param = $_FILES['myFile'][$param][index]; // params stored in indexed arrays
?>
```



# Receiving PUT Files

```
<?php
```

```
    $putdata = fopen('php://input', 'r');
```

```
    $dest = fopen('dest.txt', 'w');
```

```
    while ($data = fread($putdata, 1024)) {
```

```
        fwrite($dest, $data);
```

```
    }
```

```
    fclose($dest);
```

```
    fclose($putdata);
```

```
?>
```



# Security Considerations



Configure the web server properly



Quarantine uploaded files



Check for path navigation in uploaded file names (e.g. ../foo.txt) before using



Consider setting `open_basedir` and `doc_root` in `php.ini`



Use `is_uploaded_file()` and `move_uploaded_file()` for POSTed files

# Summary



**Sending Files**

**Receiving Files**

**Security Considerations**



# Course Outline

**Managing Files**

**Other Files Operations**

**Working with the Filesystem**

**Files and Web Services**

