Web Design & Programming

File Uploads with PHP

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File Transfer Form Basics

- A file upload feature can be added to a web page using a HTML form with PHP.
- The form must use the POST method and the *input* element with the *file* attribute.
- PHP provides specific functions to handle file uploads.

HTML Form

- When click on the button for an “input file” element the end user will be able to select a file on the local computer, using a regular file dialog.
- Adding the accept attribute to the element allows to filter specific types of files (by extension or by type).
- A regular ‘Submit’ button is still needed to validate the form and initiate the transfer.

PHP File Upload Variables

- The `$_FILES` array is set when a script receives a file from a form using the HTTP POST method.
- This array contains various information:
  - `$_FILES['uploadedFile']['name']`: original file name
  - `$_FILES['uploadedFile']['size']`: file size in bytes
  - `$_FILES['uploadedFile']['type']`: file type
  - `$_FILES['uploadedFile']['tmp_name']`: file temporary name, on the server side

PHP File Upload Functions

- An uploaded file is initially stored in a temporary folder (accessible by the web server application); and can be moved to any other location using the `move_uploaded_file` function.
- The `is_uploaded_file` function is also available to check that a file to be process is one that has been properly uploaded.

Pitfalls

- Like any other piece of information submitted via a form, an uploaded file should be considered suspicious until proven otherwise. The file name or the file type should not be processed without verification.
- Various limits could affect a file transfer: network connectivity, server configuration, available storage, … You will need to check that a file is properly processed before sending a confirmation to the end user.

Security Concerns

- Files should be uploaded in a folder outside of the web root (not under “/var/www”).
- Consider using an antivirus to analyze any uploaded file.
- Disable file uploads entirely if you don’t need that feature (“file_uploads = off” in php.ini).