

How to Replace a String in Multiple Files in a Linux Folder?

written by sysadmin | 17 January 2026

I want to replace a string that is in multiple files in a Linux folder.

Problem

How to replace a string in multiple files in a Linux folder?

Solution

For example, I want to search for the database.php word scattered across multiple PHP files in a folder, and I use the Linux command below:

```
grep -R database.php *
```

```
root@docker:/var/www# ls
portal portal-ori
root@docker:/var/www#
root@docker:/var/www# grep -R database.php *
portal/app1/index.php:require_once '../includes/database.php';
portal/app1/create.php:require_once '../includes/database.php';
portal/app1/delete.php:require_once '../includes/database.php';
portal/app1/edit.php:require_once '../includes/database.php';
portal/reset_password.php:require_once 'includes/database.php';
portal/app2/index.php:require_once '../includes/database.php';
portal/app2/create.php:require_once '../includes/database.php';
portal/app2/delete.php:require_once '../includes/database.php';
portal/app2/edit.php:require_once '../includes/database.php';
portal/register.php:require_once 'includes/database.php';
portal/login.php:require_once 'includes/database.php';
portal/run_scripts/add.php:placeholder="e.g., backup_database.php"
portal/create_admin.php:require_once 'includes/database.php';
portal-ori/app1/index.php:require_once '../includes/database.php';
portal-ori/app1/create.php:require_once '../includes/database.php';
portal-ori/app1/delete.php:require_once '../includes/database.php';
portal-ori/app1/edit.php:require_once '../includes/database.php';
portal-ori/reset_password.php:require_once 'includes/database.php';
portal-ori/app2/index.php:require_once '../includes/database.php';
portal-ori/app2/create.php:require_once '../includes/database.php';
portal-ori/app2/delete.php:require_once '../includes/database.php';
portal-ori/app2/edit.php:require_once '../includes/database.php';
portal-ori/register.php:require_once 'includes/database.php';
portal-ori/login.php:require_once 'includes/database.php';
portal-ori/create_admin.php:require_once 'includes/database.php';
root@docker:/var/www#
```

Find the string in multiple folders



In the image above, the word is scattered across multiple Linux files and in different Linux folders. So that you don't go into the file that is in a different folder one by one and then change the word database.php, for example, to config.php manually, but you can run the command below:

```
find . -type f -name "*.php" -exec sed -i 's/database\.php/config.php/g' {} +
```

which results in the image below:

```
root@docker:/var/www# find . -type f -name "*.php" -exec sed -i 's/database\.php/config.php/g' {} +
root@docker:/var/www#
root@docker:/var/www# grep -R database.php *
root@docker:/var/www#
```



Replace the string in multiple folders

In the image above, you can see that the word has been successfully changed to config.php, which is not found when you search for database.php. If you just change the database.php word to config.php in a folder, as shown in the image below:

```
root@docker:/var/www/portal/logs# ls
add.php      add.php.ori    config.php.bkp5  edit.php      edit.php.bkp2  edit.php.ori    index.php      index.php.bkp2  index.php.bkp5  search.php     view.php
add.php.bkp  config.php     config.php.ori  edit.php.bkp  edit.php.bkp3  files.php       index.php.bkp  index.php.bkp3  index.php.ori  style.css     view.php.bkp
add.php.bkp1 config.php.bkp3 delete.php      edit.php.bkp1 edit.php.bkp4  files.php.ori  index.php.bkp1 index.php.bkp4  readme.txt    uploads      view.php.ori
root@docker:/var/www/portal/logs#
root@docker:/var/www/portal/logs# grep -R database.php *
add.php:require 'database.php';
delete.php:require 'database.php';
edit.php:require 'database.php';
files.php:require 'database.php';
index.php:require 'database.php';
search.php:require 'database.php';
view.php:require 'database.php';
root@docker:/var/www/portal/logs#
```



Find the string in a folder

You can use the format below to replace the word:

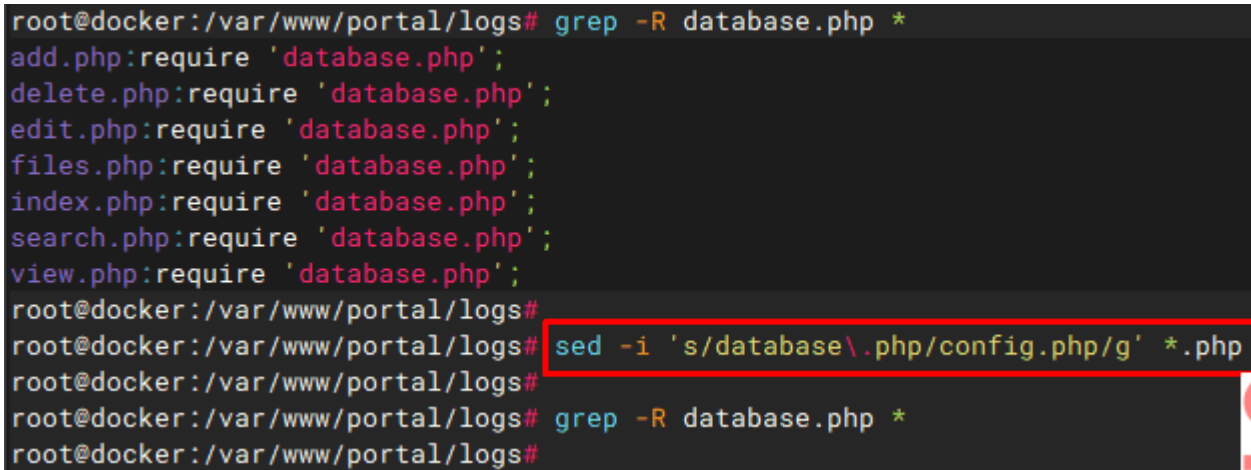
```
sed -i 's/old_word/new_word/g' filename
```

So you can run the command below to change the word database.conf to config.php

```
sed -i 's/database\.php/config.php/g' *.php
```

So it will look like the image below:

```
root@docker:/var/www/portal/logs# grep -R database.php *
add.php:require 'database.php';
delete.php:require 'database.php';
edit.php:require 'database.php';
files.php:require 'database.php';
index.php:require 'database.php';
search.php:require 'database.php';
view.php:require 'database.php';
root@docker:/var/www/portal/logs#
root@docker:/var/www/portal/logs# sed -i 's/database\.php/config.php/g' *.php
root@docker:/var/www/portal/logs#
root@docker:/var/www/portal/logs# grep -R database.php *
root@docker:/var/www/portal/logs#
```



Replace the string in a folder

In the image above, you can see that the string database.php has been changed to config.php.

Note

If you're still unsure about running the two commands above to change a word scattered across multiple files, you can preview the results you expect. For example, if you want to preview the results first before you permanently change the changes in a folder, then you can run the command below:

```
sed 's/database\.php/config.php/g' *.php | grep database.php
```

and the result will be as shown in the image below:

```
root@docker:/var/www/portal/logs# grep -R database.php *
add.php:require 'database.php';
delete.php:require 'database.php';
edit.php:require 'database.php';
files.php:require 'database.php';
index.php:require 'database.php';
search.php:require 'database.php';
view.php:require 'database.php';
root@docker:/var/www/portal/logs#
root@docker:/var/www/portal/logs# sed 's/database\.php/config.php/g' *.php | grep config.php
require 'config.php';
require 'config.php';
require 'config.php';
require 'config.php';
require 'config.php';
require 'config.php';
require 'config.php';
```



Preview the result

And if you want to automatically back up when changing a string in multiple files, then use the command below:

```
sed -i.bak 's/database\.php/config.php/g' *.php
```

Then the result will be as shown in the image below:

```
root@docker:/var/www/portal/logs# grep -R database.php *
add.php:require 'database.php';
delete.php:require 'database.php';
edit.php:require 'database.php';
files.php:require 'database.php';
index.php:require 'database.php';
search.php:require 'database.php';
view.php:require 'database.php';
root@docker:/var/www/portal/logs#
root@docker:/var/www/portal/logs# sed -i.bak 's/database\.php/config.php/g' *.php
root@docker:/var/www/portal/logs#
root@docker:/var/www/portal/logs# grep -R database.php *
add.php.bak:require 'database.php';
delete.php.bak:require 'database.php';
edit.php.bak:require 'database.php';
files.php.bak:require 'database.php';
index.php.bak:require 'database.php';
search.php.bak:require 'database.php';
view.php.bak:require 'database.php';
root@docker:/var/www/portal/logs#
```



Back up the file(s) automatically

In the image, you can see that files that have the word database.php are automatically backed up to files with the

.bak extension.

References

unix.stackexchange.com

askubuntu.com

stackoverflow.com