



# How to Search Files by Name or Extension Using find Command

Aaron Kili | Last Updated: August 7, 2024 | Read Time: 3 mins | [Linux Commands](#) | [13 Comments](#)

Many times, we find ourselves in a situation where we need to search for multiple files with different extensions, which is a common scenario for many Linux users, especially when working within the terminal.

There are [several Linux utilities](#) that we can use to locate files on the file system, but finding files with multiple extensions can sometimes prove tricky and [require specific commands](#).

One of the many utilities for locating files on a Linux file system is the [find utility](#). In this how-to guide, we will walk through a few examples of using find to help us locate multiple filenames at once.

Before we dive into the actual commands, let us look at a brief introduction to the Linux `find` utility.

## Introduction to the find Command

The find command is a versatile tool used to search for files and directories in a Linux file system.

The simplest and most general syntax of the find utility is as follows:

```
find directory options [expression]
```

Here's a brief overview of its components:

- **directory:** The directory where you want to start the search.
- **options:** Additional parameters to refine your search.
- **expression:** Conditions to match files or directories.

Let us proceed to look at some examples of find command in Linux.

## Searching for Multiple File Extensions

To find files with different extensions, you can use the `-name` option combined with the `-o` (OR) operator, which allows you to specify multiple patterns to match different file types.

Let's go through some examples to illustrate how this works.

### Example 1: Finding .sh and .txt Files

Assuming that you want to find all files in the current directory with `.sh` and `.txt` file extensions, you can do this by running the command below:

```
find . -type f \( -name "*.sh" -o -name "*.txt" \)
```

```
aaronkilik@tecMint ~/bin $ find . -type f \( -name "*.sh" -o -name "*.txt" \)
./examples.txt
./script.sh
./test.sh
./list.txt
aaronkilik@tecMint ~/bin $
```

Find .sh and .txt Extension Files in Linux

Interpretation of the command above:

- `.` means the current directory
- `-type` option is used to specify file type and here, we are searching for regular files as represented by `f`
- `-name` option is used to specify a search pattern in this case, the file extensions
- `-o` means "OR"

It is recommended that you enclose the file extensions in a bracket, and also use the `\` (back slash) escape character as in the command.

## Example 2: Finding .sh, .txt, and .c Files

To find three filenames with `.sh`, `.txt` and `.c` extensions, issues the command below:

```
find . -type f \( -name "*.sh" -o -name "*.txt" -o -name "*.c" \)
```

```
aaronkilik@tecMint ~/bin $ find . -type f \( -name "*.sh" -o -name "*.txt" -o -name "*.c" \)
./examples.txt
./script.sh
./test.sh
./list.txt
./file.c
./header.c
./lost.c
aaronkilik@tecMint ~/bin $
```

Find Multiple File Extensions in Linux

## Example 3: Finding .png, .jpg, .deb, and .pdf Files

Here is another example where we search for files with `.png`, `.jpg`, `.deb` and `.pdf` extensions:

```
find /home/aaronkilik/Documents/ -type f \( -name "*.png" -o -name "*.jpg"
```

```
aaronkilik@tecMint ~ $ find /home/aaronkilik/Documents/ -type f \( -name "*.png" -o -name "*.jpg"
-o -name "*.deb" -o -name "*.pdf" \)
/home/aaronkilik/Documents/sudo.png
/home/aaronkilik/Documents/festival3.jpg
/home/aaronkilik/Documents/true.jpg
/home/aaronkilik/Documents/keyboard.jpg
/home/aaronkilik/Documents/programmers.jpg
/home/aaronkilik/Documents/own_business.jpg
/home/aaronkilik/Documents/HIM.jpg
/home/aaronkilik/Documents/life.jpg
/home/aaronkilik/Documents/cabling.png
/home/aaronkilik/Documents/Tecmint-News/ServerMania-Cloud-Hosting.jpg
/home/aaronkilik/Documents/f8M93fM.jpg
/home/aaronkilik/Documents/linux.jpg
/home/aaronkilik/Documents/children.jpg
/home/aaronkilik/Documents/dp.jpg
/home/aaronkilik/Documents/festival2.jpg
/home/aaronkilik/Documents/keyboard-shortcuts.jpg
/home/aaronkilik/Documents/festival.jpg
/home/aaronkilik/Documents/Tecmint.com/How to Upgrade To Linux Mint 18 /check-mintupgrade1.png
/home/aaronkilik/Documents/Tecmint.com/How to Upgrade To Linux Mint 18 /download-complete.png
/home/aaronkilik/Documents/Tecmint.com/How to Upgrade To Linux Mint 18 /upgrade3.png
/home/aaronkilik/Documents/Tecmint.com/How to Upgrade To Linux Mint 18 /download-mintupgrade-packa
ges.png
/home/aaronkilik/Documents/Tecmint.com/How to Upgrade To Linux Mint 18 /check-unlimited-scrolling.
png
/home/aaronkilik/Documents/Tecmint.com/How to Upgrade To Linux Mint 18 /update-manager.png
/home/aaronkilik/Documents/Tecmint.com/How to Upgrade To Linux Mint 18 /package-configuration.png
```

Find More than 3 File Extensions in Linux

## Example 4: Using Wildcards to find

You can also use wildcards to match patterns. For instance, to find all files with `.log`, `.txt`, or `.cfg` extensions:

```
find /var/log/ -type f \( -name "*.log" -o -name "*.txt" -o -name "*.cfg" \)
```

## Example 5: Finding Files with Complex Patterns

Suppose you want to find files that end with `.tar.gz` or `.zip`:

```
find /path/to/search/ -type f \( -name "*.tar.gz" -o -name "*.zip" \)
```

When you critically observe all the commands above, the little trick is using the `-o` option in the find command, it enables you to add more filenames to the search array, and also know the filenames or file extensions you are searching for.

## Conclusion

In this guide, we have explored how to use the [find command](#) to search for files with multiple extensions. By using the `-name` option in combination with the `-o` operator, you can easily locate files that match various patterns in a single command.

To dive deeper into the `find` command and its many capabilities, you can refer to the `find` manual page by typing `man find` in your terminal.

```
man find
```

Feel free to experiment with these commands and adapt them to your specific needs!

Hey TecMint readers,

Exciting news! Every month, our top blog commenters will have the chance to win fantastic rewards, like free Linux eBooks such as RHCE, RHCSA, LFCS, Learn Linux, and Awk, each worth \$20!

Learn [more about the contest](#) and stand a chance to win by [sharing your thoughts below!](#)

# GIVEAWAY!

## Win eBooks



[www.tecmint.com](http://www.tecmint.com)

PREVIOUS ARTICLE:

**[How to Use 'next' Command with Awk in Linux – Part 6](#)**

NEXT ARTICLE:

**[9 Best Self-Hosted Alternatives to Google Photos](#)**



## Aaron Kili

Aaron Kili is a Linux and F.O.S.S enthusiast, an upcoming Linux SysAdmin, web developer, and currently a content creator for TecMint who loves working with computers and strongly believes in sharing knowledge.

*Each tutorial at TecMint is created by a team of experienced Linux system administrators so that it meets our high-quality standards.*

Join the [TecMint Weekly Newsletter](#) (More Than 156,129 Linux Enthusiasts Have Subscribed)

Was this article helpful? Please [add a comment](#) or [buy me a coffee](#) to show your appreciation.

## Related Posts



## 10 Lesser Known Linux Commands – Part 2

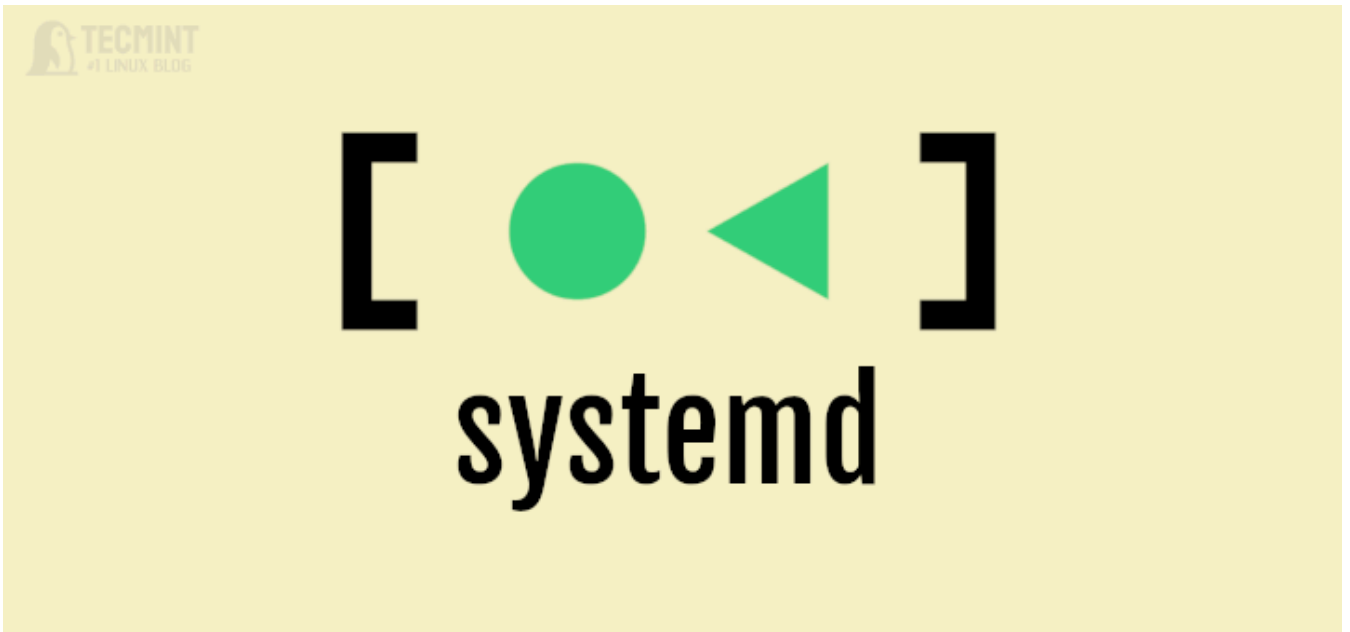


## 11 Lesser Known Useful Linux Commands





## 26 Security Hardening Tips for Modern Linux Servers

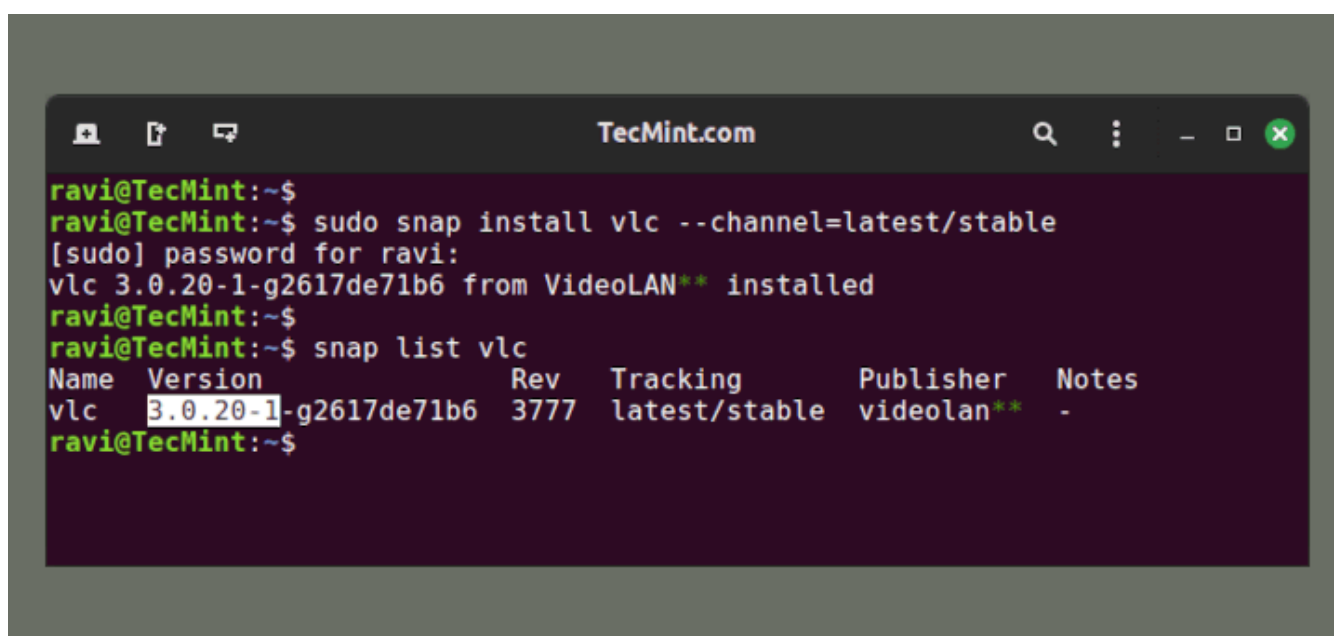


## How to Remove Systemd Services on Linux

A terminal window titled 'TecMint.com' showing the configuration of glibc-2.39. The user is in the directory ~/glibc-2.39/builds and runs './configure --prefix=/usr/local/glibc-2.39'. The output shows various checks for build system type, host system type, compiler (gcc), and linker (g++). It also checks for various architectures and features. The output is as follows:

```
ravi@TecMint:~/glibc-2.39/builds$  
ravi@TecMint:~/glibc-2.39/builds$ ../configure --prefix=/usr/local/glibc-2.39  
checking build system type... x86_64-pc-linux-gnu  
checking host system type... x86_64-pc-linux-gnu  
checking for gcc... gcc  
checking for suffix of object files... o  
checking whether the compiler supports GNU C... yes  
checking whether gcc accepts -g... yes  
checking for gcc option to enable C11 features... none needed  
checking for g++... g++  
checking whether the compiler supports GNU C++... yes  
checking whether g++ accepts -g... yes  
checking for g++ option to enable C++11 features... none needed  
checking whether g++ can link programs... yes  
checking for sysdeps preconfigure fragments... aarch64 alpha arc arm csky hppa i386 loong  
arch m68k microblaze checking for grep that handles long lines and -e... /usr/bin/grep  
checking for egrep... /usr/bin/grep -E  
mips nios2 orlk powerpc riscv s390 sh checking for grep that handles long lines and -e...  
(cached) /usr/bin/grep
```

## How to Install and Run Multiple glibc Libraries in Linux

A terminal window titled 'TecMint.com' showing the installation of VLC using Snap. The user runs 'sudo snap install vlc --channel=latest/stable'. The output shows the password prompt and the installation of VLC 3.0.20-1-g2617de71b6 from VideoLAN. The user then runs 'snap list vlc' and the output shows the installed version and tracking information. The output is as follows:

```
ravi@TecMint:~$  
ravi@TecMint:~$ sudo snap install vlc --channel=latest/stable  
[sudo] password for ravi:  
vlc 3.0.20-1-g2617de71b6 from VideoLAN** installed  
ravi@TecMint:~$  
ravi@TecMint:~$ snap list vlc  
Name Version Rev Tracking Publisher Notes  
vlc 3.0.20-1-g2617de71b6 3777 latest/stable videolan** -  
ravi@TecMint:~$
```

## How to Install Particular Versions of Packages with Snap

 **13 Comments**

[Leave a Reply](#)

tyson

March 6, 2020 at 11:59 am

Very helpful post, it helped me to remove malicious files from 20 WordPress sites, it was hard to find and manually delete them.

[Reply](#)



**Aaron Kili**

March 9, 2020 at 2:04 pm

@tyson

We are glad that this guide helped you. Thanks for the feedback.

[Reply](#)

**sudarshan**

January 15, 2019 at 6:14 pm

copying alternate lines from file to specified directory

[Reply](#)

**Anusha**

December 4, 2018 at 12:59 pm

How to find all `.cpp` files which consist of sub string shares in the file name?

[Reply](#)**Karl**

June 16, 2018 at 12:54 am

Ravi,

Thanks for sharing.

How to use the find command to search for a file with a range of dates?

[Reply](#)**Aaron Kili**

December 5, 2018 at 9:37 am

@Karl

You can use a similar command like this:

```
$ find . -newerct "1 Dec 2018" ! -newerct "4 Dec 2018" -ls
```

For more information, see the find man page.

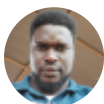
[Reply](#)**anonymous**

November 16, 2016 at 5:35 am

You can pipe the output of find to egrep:

```
# find . -type f | egrep -i "[.]sh$|[.]txt$"
```

[Reply](#)



**Aaron Kili**

January 2, 2018 at 11:20 am

@anonymous

Useful tip, thanks for sharing.

[Reply](#)

**vlad**

July 22, 2016 at 1:37 pm

ls \*.ext1 \*.ext2

seems to be way simpler.

[Reply](#)



**Aaron Kili K**

July 22, 2016 at 4:44 pm

@vlad

That works but it may not be efficient and reliable enough for the job, especially when you want to search in several locations.

[Reply](#)

**Surya**

January 1, 2018 at 2:54 pm

"ls" works only for current directory content listing. It won't search files recursively in any sub directories if available. So, we need to use [find command](#) only which will search in sub-directories also.

[Reply](#)

**libreman**

July 21, 2016 at 1:53 am

Another way is using `-regextype` and `-iregex` switch, fore example:

```
$ find . -regextype posix-egrep -iregex '.*\.(xml|txt)$' -type f
```

The above command find all files with xml or txt extension.

[Reply](#)

Admin



**Ravi Saive**

July 21, 2016 at 12:38 pm

@Libreman,

Thanks for the great tip, If find it really very useful commandline trick to achieve the same results, hope it will be useful to others..

[Reply](#)

### Got Something to Say? Join the Discussion...

*Thank you for taking the time to share your thoughts with us. We appreciate your decision to leave a comment and value your contribution to the discussion. It's important to note that we moderate all comments in accordance with our [comment policy](#) to ensure a respectful and constructive conversation.*

*Rest assured that your email address will remain private and will not be published or shared with anyone. We prioritize the privacy and security of our users.*



Name \*

Email \*

☐ Save my name, email, and website in this browser for the next time I comment.

Post Comment

## Do You Enjoy My Blog?

Support from readers like YOU keeps this blog running. Buying me a cup of coffee is a simple and affordable way to show your appreciation and help keep the posts coming!

[Buy Me a Coffee](#)

## Linux Commands and Tools

[Understanding Shared Libraries in Linux](#)[20 Practical Examples of RPM Commands in Linux](#)[10 Lesser Known Useful Linux Commands- Part V](#)[How to Delete all Text in a File Using Vi/Vim Editor](#)[16 Top Command Examples in Linux \[Monitor Linux Processes\]](#)[11 Cron Command Examples in Linux \[Schedule Cron Jobs\]](#)

## Linux Server Monitoring Tools

[How to Do Security Auditing of Linux System Using Lynis Tool](#)[Watchman – A File and Directory Watching Tool for Changes](#)[How to Monitor Linux Server Security with Osquery](#)[CloudStats.me – Monitors Your Linux Servers and Websites from the Cloud](#)



## **Perf- A Performance Monitoring and Analysis Tool for Linux**

### **6 Key Performance Metrics to Monitor in Linux Servers – Part 1**

## **Learn Linux Tricks & Tips**

### **10 Useful Linux Command Line Tricks for Newbies – Part 2**

### **Useful Commands to Create Commandline Chat Server and Remove Unwanted Packages in Linux**

### **How to Delete HUGE (100–200GB) Files in Linux**

### **6 Useful Tools to Remember Linux Commands Forever**

### **How to Append Text to End of File in Linux**

### **How to Save Command Output to a File in Linux**

## **Best Linux Tools**

### **10 Best Linux File and Disk Encryption Tools (2024)**

### **Top 4 Google Docs Alternatives for Linux in 2024**

### **11 Best Free and Low-Cost SSL Certificate Authorities**

### **17 Best KDE Multimedia Applications for Linux**

### **20 Useful Security Features and Tools for Linux Admins**

### **8 Best SSH Clients for Linux in 2024**

Tecmint: Linux Howtos, Tutorials & Guides © 2024. All Rights Reserved.

The material in this site cannot be republished either online or offline, without our permission.

Hosting Sponsored by : [Linode Cloud Hosting](#)