

 $nixCraft \rightarrow Howto \rightarrow BASH Shell \rightarrow How To Run the .sh File Shell Script In Linux / UNIX$

How To Run the .sh File Shell Script In Linux / UNIX

Author: Vivek Gite

Last updated: March 23, 2023

56 comments

have downloaded software for my Linux or Unix-like system from the Internet. There is a file called install.sh. How do I run an .sh file to install the software in macOS? How do your run .sh files from command line?



You can open or run .sh file in the terminal on Linux or Unix-like system. The .sh file is nothing but the shell script to install given application or to perform other tasks under Linux and UNIX like operating systems. The easiest way to run .sh shell script in Linux or UNIX is to type the following commands. Open the terminal (your shell prompt) and type the commands.

Tutorial details			
Difficulty level	<u>Easy</u>		
Root privileges	No		
Requirements	Linux terminal		
Category	Linux shell scripting		
OS compatibility	BSD • <u>Linux</u> • <u>macOS</u> • <u>Unix</u> • WSL		
Est. reading time	4 minutes		



How do I run .sh file shell script in Linux?

The procedure to run the .sh file shell script on Linux is as follows:

- 1. Open the Terminal application on Linux or Unix
- 2. Create a new script file with .sh extension using a text editor
- 3. Write the script file using nano script-name-here.sh
- 4. Set execute permission on your script using chmod command:

```
chmod +x script-name-here.sh
```

5. To run your script:

Another option is as follows to execute shell script:

```
sh script-name-here.sh
```

OR

bash script-name-here.sh

Let us see script examples and usage in details.



Syntax

The syntax is:

sh file.sh

OR

bash file.sh

How to run .sh file as root user

Some time you need root access to install application; without root, you won't have the necessary permissions to install application or make system level modifications. Root access is disabled by default on many Linux and UNIX like systems. Simply use the sudo command or su command as follows:

sudo bash filename.sh

Type your password. Another option is to use the su command as follows to become

superuser:

su -

Type root user password and finally run your script:

bash filename.sh

How to use chmod command to run .sh shell script in Linux



Another recommend option is to set an executable permission using the chmod command as follows:

chmod +x file.sh

Now your can run your .sh file as follows

./file.sh
/path/to/file.sh

How do I run .sh file named install.sh?

Just run the following two command:

```
chmod +x install.sh
./install.sh
```

The dot (.) refers to the current working directory. The install.sh is in the current directory so you run it as above or as follows too:

```
bash install.sh
```

OR

sh install.sh

GUI method to run .sh file

- 1. Select the file using mouse.
- 2. Right-click on the file.
- 3. Choose Properties:

- 4. Click **Permissions** tab.
- 5. Select Allow executing file as a program:

6. Now click the file name and you will be prompted. Select "Run in the terminal" and it will get executed in the terminal.

Running .sh file shell script and debugging options

Pass the _-x to debug shell script when running on your system. It print commands and their arguments as they are executed. For example:

```
bash -x script-name.sh
sh -x script-name.sh
```

Want to show shell input lines as they are read. Try passing the -v option:

```
bash -v script-name
```

We can combine both options. In other words, try it as follows:

```
bash -x -v backup.sh
```

For more information see how to <u>improve your bash/sh shell script with ShellCheck</u> <u>lint script analysis tool</u> and other <u>bash debugging hints here</u>.

Conclusion

You learned how to run .sh file shell script using combination of the chomod and dot (.) or sh/bash command. We can use any one of the following command execute shell script on Linux and Unix-like systems:

```
bash script.sh
sh my-script.sh
## or
chmod +x /path/to/script/file
/path/to/script/file
```

See the following resources for more info:

• Setting up permissions on a script

Linux Bash Shell Scripting Tutorial

You can read GNU/BASH or KSH man pages using the man command or help command or read it online:

man bash man ksh

About the author: Vivek Gite is the founder of nixCraft, the oldest running blog about Linux and open source. He wrote more than 7k+ posts and helped numerous readers to master IT topics. Join the nixCraft community via RSS Feed or Email Newsletter.

Was this helpful? Please add a comment to show your appreciation or feedback. nixCraft is a one-person show, and many of you use Adblocker. Keeping the site online is challenging, with everyone blocking Ads . Please support the nixCraft with a PayPal donation or Patreon.



🔑 To search, type & hit enter...

Related Tutorials

Howto run a shell script without changing file access...

Linux / Unix: Shell Script Find Out In Which Directory...

How to run shell script in Linux

Run shell script from web page

Howto: Use mysql or run mysql queries from shell script

How to: Run a shell script with nohup command

Applescript: Run or Call a Shell Script

Category	List of Unix and Linux commands				
Ansible	Check version • Fedora • FreeBSD • Linux • Ubuntu 18.04 • Ubuntu • macOS				
Archiving	z commands				
Backup Management	Debian/Ubuntu • FreeBSD • RHEL				
Database Server	Backup MySQL server • MariaDB Galera cluster • MariaDB TLS/SSL • MariaDB replication • MySQL Server • MySQL remote access				

Category	List of Unix and Linux commands				
Download managers	wget				
Driver Management	Linux Nvidia driver • Ismod				
Documentation	help • mandb • man • pinfo				
Disk Management	df • duf • ncdu • pydf				
File Management	cat • cp • less • mkdir • more • tree				
Firewall	Alpine Awall • CentOS 8 • OpenSUSE • RHEL 8 • Ubuntu 16.04 • Ubuntu 18.04 • Ubuntu 20.04 • Ubuntu 24.04				
KVM Virtualization	CentOS/RHEL 7 • CentOS/RHEL 8 • Debian 9/10/11 • Ubuntu 20.04				
Linux Desktop apps	Chrome • Chromium • GIMP • Skype • Spotify • VLC 3				
LXD	Backups • CentOS/RHEL • Debian 11 • Fedora • Mount dir • Ubuntu 20.04 • Ubuntu 22.04				
Modern utilities	bat • exa				
Network Management	Monitoring tools • Network services • RHEL static IP • Restart network interface • nmcli				
Network Utilities	NetHogs • dig • host • ip • nmap • ping				
OpenVPN	CentOS 7 • CentOS 8 • Debian 10 • Debian 11 • Debian 8/9 • Ubuntu 18.04 • Ubuntu 20.04				
Power Management	upower				
Package Manager	apk • apt-get • apt • yum				
Processes	bg • chroot • cron • disown • fg • glances • gtop • iotop • jobs • killall • kill • pidof •				
Management	pstree • pwdx • time • vtop				
Searching	ag • egrep • grep • whereis • which				
Shell builtins	compgen • echo • printf				
System Management	reboot • shutdown				

Category	List of Unix and Linux commands				
Terminal/ssh	sshpass • tty				
Text processing	cut • rev				
Text Editor	6 Text editors • Save and exit vim				
User Environment	exit • who				
User Information	groups • id • lastcomm • last • lid/libuser-lid • logname • members • users • whoami • w				
User Management	/etc/group • /etc/passwd • /etc/shadow • chsh				
Web Server	Apache • Let's Encrypt certificate • Lighttpd • Nginx Security • Nginx				
WireGuard VPN	Alpine • Amazon Linux • CentOS 8 • Debian 10 • Firewall • Ubuntu 20.04 • qrencode				

56 comments... add one ↓

lekhraj

Oct 1, 2007 @ 7:53

anybody tell by which coomand i will check the modified date of files/dir in linux o/s

reply link

sushant suryawanshi

Oct 13, 2012 @ 8:14

date -s "2 OCT 2006 18:00:00"

reply link

rashid

Feb 20, 2008 @ 9:38

if we want to install software from cd.. how should be the command? i'm the newbie

reply link

Varun

Feb 22, 2022 @ 8:37

What are you guys doing rn?

reply link

anonomys

Dec 19, 2008 @ 21:43

rashid, if you want to install software from the cd you should try synaptic package handler or apt-get .

if the software is usually from the cd it will tell you to insert it

reply link

Black_Ps`

Jun 11, 2009 @ 3:31

How can i execute this command export PS1="\[[33[01;32m\]\u@\h\[33[01;34m\] \W]\]#" from a .sh script for example and make it work ?

Thanks.

reply link

J_Art

Jun 21, 2009 @ 21:51

Hey Black_Ps`

There are a few ways to do this but if you are not familiar with some of the nuances of Linux, it might be easier to create a new folder to place the file in (or all of your scripts in) like home/username/Desktop/scripts (substituting the actual user name in place of username). The following instructions are based on Fedora 10 with GNOME desktop so if you are running a different Linux distro, you may or may not have a few slight variances. Once you have a good place to store your scripts, you can use the

GUI to help with creation of the shell script. Next, click on the "Applications" menu and highlight "Accessories" and then select "Text Editor" Type the following command #!/bin/bash and then press the enter key. Now, type the command you listed into the text editor and then select the "Save As" option. Now name your file (highly recommended that you don't name it with spaces and make the name all lower case to help with ease of use later) and save it to your new folder you created...remember to give it a .sh name extension. Now close the text editor and go back to the "Applications" menu and highlight "System Tools" and then select "Terminal". Type the following command cd /home/username/Desktop/scripts (again substituting the actual user name in place of username). The command is and then press the enter key. Did it return the name of your script as a file in that folder? If so, move on to the next step. If it did not, navigate to the folder where you saved this file and move it to the correct folder. Type the following command chmod 755 yourfilename.sh. That's it, you now have an executable shell script that will execute your command. You can do so by double clicking on it from the GUI, calling it from the terminal like so bash /home/username/Desktop/scripts/yourfilename.sh or you could put it on the cron to run unattended if you needed to. I hope this helps some or at least points you in the right direction.

reply link

kashif

Feb 9, 2012 @ 11:53

can you please expalin it more detailes.

reply link

Black Ps'

Jun 21, 2009 @ 22:09

Ok thanks i'll give it a try

reply link

shunan

Jun 30, 2009 @ 6:17

When i open the terminal in UNIX..something like interactive keyboard authentication bla.. bla.. is coming..nd its difficult me to go on typing my commands and navigating through the directors and files..how can i fix this..? any idea...? any command? anything helpful will be highly appreciated. thanks

reply link

J_Art

Jun 30, 2009 @ 21:52

Hi shunan

Is it safe to assume that you have someone in an administrative role who oversees the security of this UNIX terminal? The reason I ask is because this sounds like something I encountered once with something called PAM (Pluggable Authentication Module). It's a security concept that involves VSHELL. To be perfectly honest, I'm not too familiar with it and the only thing I can vaguely remember about it is that it somehow involves configuring authentication to be controlled by PAM via keyboard-interactive authentication. I realize I didn't help much here but I hope this at least points you in the right direction. PAM is a product of SUN so you might find something worth while on their page but I haven't really read up on it so I can't make any promises. -> http://www.sun.com/software/solaris/pam/

reply link

Nate

Sep 23, 2009 @ 20:06

This is just straight pissing me off.

I've run the install.sh file in the terminal and have gotten to a eula where it asks if I accept and to type yes or no. I type yes and hit enter.

it said it can't install it because permission is denied. But a window didn't pop up to ask for my password.

I'm about to kick Ubuntu in the face.

reply link



Sep 23, 2009 @ 20:46

Try

sudo sh install.sh

reply link

hhxxxuu

Jul 12, 2011 @ 10:40

haha

reply link

Dare_devil

Dec 2, 2009 @ 22:52

hi i am newbie too to linux system i've a direct question:

i have arch linux but nothing from these commands work terminal tell me the following:

command not found

help me!

reply link

tugrul

Mar 2, 2010 @ 22:25

if you are using fedora 12 like i am, open up the terminat, switch to the root and with the terminal get on the fileway that you downloaded your .sh file.So write "sh YOURDOWNLOADEDFILE.sh" click on enter and that's it

reply link

Gary James

Mar 8, 2010 @ 20:50

Excellent advice. Thanks Gary (A newly converted Linux enthusiast)

reply link

dishant

Mar 23, 2010 @ 9:16

can i execute a shell script in another shell script

reply link

Iqbal

Jun 5, 2010 @ 9:28

Hey all,

Yes dishant,

You can run the shell script inside the other.

But keep in mind that In the second script do not kill the first one.

If you want to kill the first one, then back up the file name somewhere and kill it, then use that path in the second script.

Cheers,

Iqbal S.

reply link

panchotiya jigar r

Apr 15, 2010 @ 16:57

this is the best site of linux information to me

i learn lots of by this web site

it's realy very helpful web site

i use this website for longtime

it's give all answer of your questions

thanks for help

reply link

sara

Aug 21, 2010 @ 6:11

in fedora 12 i switch to root by command : su and ./install.sh but the error come out: install.sh: No such file or directory why?

i want to know how it detect the folder install.sh is inside?

reply link

sara

Aug 21, 2010 @ 6:12

switch to root with command: su -

reply link

MikeM

Nov 2, 2010 @ 14:12

So, I have a similar problem as Sara. Created a miketest.sh script, and used "./" prefix to execute it, and received "ksh: ./miketest.sh: not found."

If I use "sh" instead of "./" it seems to run fine.

Permissions of miketest.sh are set to 777.

I have other scripts that run fine, and some that do not... What am I missing here?

reply link

pari

Feb 28, 2011 @ 4:57

may be u r not giving the correct path, check ur path again. Firstly reach to ur folder n then switch to root. I know it is very basic thing but sometimes mistake happens in such things also...

reply link

dave

Apr 23, 2011 @ 4:17

This is hilarious. Came across this site by accident, but just noticed advice to a newbie.

"Open the terminal (your shell prompt) and type the command:"

To a newbie, that is still gibberish.

reply link

nathan

Jun 13, 2011 @ 10:08

nice one for beginners.. good working

reply link

shin_chan

Jul 6, 2011 @ 5:06

Alright a very nice tutorial....really helpful but I have a little problem.....

I want to run the .sh in background so that even I can logout.

I am using the command "nohup sh filename.sh &" and a file named "nohup.out" is also made but it contains an error which says "no such file or directory"...I am using the command in folder where the .sh file is located.

Pls tell where I am doing it wrong!!!!

reply link

Clifford

Feb 3, 2012 @ 0:43

Put the following at the end of the syntax:

2>&1 &

I hope this helps!!!

reply link

sonaht

Aug 23, 2011 @ 20:39

Thanks for this good and clear information. Very helpful for eachothers.. that are beginners:)

reply link

Areeg

Sep 18, 2011 @ 23:59

in ubunto 11.04

you need to specify the full path of the file not only th name .sh

reply link

Dhruv

Sep 22, 2011 @ 19:41

very nice ... i need some more article on that particular topics can you please send me some link so that i can check daily

reply link

kishore

Nov 7, 2011 @ 16:36

i m getting the error outputThe program returned an error code (126)........ when i run the sh script.sh

reply link

ashok

Mar 1, 2012 @ 8:35

how to save modified .sh file.lam trying to install hadoop on my system.But JAVA_HOME path is to be changed from jdk 1.5 to jdk6.i need to modify hadoopenv.sh file.But mysystem is not allowing.please suggest me

reply link

maxx

Mar 11, 2012 @ 7:13

thanks for the clear information

reply link

Doug

Apr 3, 2012 @ 23:28

I am trying o run "admire_root.sh" in my terminal. In several attempts at rooting my phone. Samsung SCH 720 Admire. In the You Tube video "

http://www.youtube.com/watch?v=EEpU8-RBVHo" the tech describes very fast "You may need to run chmod or chmod 755 run.sh" ?? What ever that means.???

I have googles searched till my fingers blead and eyes tear . This is going on 5 days. I cannot figure this out. Please help.

My question is. When I am in Terminal— What do I type in order to run the admire_root.sh file? Or Chmod 755 the file? Can I simply copy paste the script from the file into Terminal?

reply link



Apr 4, 2012 @ 11:11

Type any one of the following command:

```
chmod +x admire_root.sh
./admire_root.sh

OR
bash admire_root.sh

OR
```

Hennie

reply

Jun 17, 2012 @ 20:30

link

thnx for this info noobs like us are always looking for simple clean command lines i created a script that cleans/delete logfiles but could not test it using the simple bash filename.sh i could test it added the cronjob after that and it all works fine

#!/bin/bash

OWNER=root
TARGETDIR_1=/var/log
FILE_1=XXX.log

echo && date

if test -f \$TARGETDIR_1/\$FILE_1 ; then
echo "XXX.log present!"
chown \$OWNER \$TARGETDIR 1/\$FILE 1

rm \$TARGETDIR_1/\$FILE_1

else

echo "No XXX.log present?!?!Nothing to remove"

fi

exit

reply link

ramchandra deshmukh

Oct 29, 2012 @ 7:51

sir i try script program us but plz explain at commands in details in terminal prompt ...

reply link

balakrishnan

Dec 3, 2012 @ 6:21

i want to include macro in my script file like #define INT int how to use this macro in my script file

reply link

cat

Jan 20, 2013 @ 7:54

hey guys:)

i want a script to send data from DB to E-mail automatically

reply link

Rajesh Sharma

Aug 22, 2013 @ 20:18

Please tell me how to download software from net to run unix command in desktop

reply link

Ravinder

Oct 19, 2013 @ 6:36

thanks guys. this is really helpful

reply link

abdul

Apr 22, 2014 @ 8:22

i need to write a shell script that will give read, write and execute permissions to the file owner and group owner of the file

reply link

Jas

Jun 16, 2014 @ 5:32

Can anybody help me how to schedule below command to run every week on Monday?

df -h |egrep 'Filesystem|log|new' |awk '{print \$0,"\n"}' | less | mailx -s "subject" mail@company.com

Thanks in advance for your help.

reply link

venkat

Apr 30, 2015 @ 16:13

1) I want create one shell which connects to 4 diffrent servers and executes different shells.

ex:a) 172.30.8.40 path: DDP1/shell1.sh

b)172.30.8.41 path:DDP1/shell2.sh

c)172.30.8.42 path:DDP1/shell3.sh

d)172.30.8.43 path:DDP1/shell4.sh

i have general user but i need to connect to sudo also. please any one help me.

reply link

Stan

Aug 12, 2015 @ 7:59

Thanks for article.

If i want to run my script "up.sh" just like command "up". What should i do for this? Thanks.

reply link



Aug 12, 2015 @ 11:23

```
mkdir ~/bin/
cp up.sh ~/bin/
export PATH=$PATH:$HOME/bin/
up
```

reply link

vanya

Oct 26, 2015 @ 11:33

thx

that article helped me =)

reply link

George

Nov 9, 2015 @ 8:36

Thank you very much !!!

reply link

WS

Feb 28, 2016 @ 17:03

Muito obrigado por elaborar e compartilhar esse tutorial

reply link

Chukka Nukka

Oct 27, 2016 @ 20:03

Thank you.

reply link

s.syedali fathima

Feb 17, 2017 @ 8:40

1. How to install cp -R in linux?

reply link

bash

Aug 30, 2017 @ 19:35

bash -x

for debugging

reply link

रामलाल त्रिवेदी

Feb 27, 2021 @ 10:06

यह बहुत बढ़िया ट्यूटोरियल है. विवेक भाई, कृपया इस तरह के अच्छे काम करते रहें.

reply link

Chris Cole

Apr 18, 2021 @ 14:11

I am reading this the 5th time and still do not understand a thing. I'm calling my 15 year old daughter to translate...

reply link

Anonymous

Mar 23, 2023 @ 19:39

To run a shell script (.sh) file in Linux, you can follow these steps:

Open a terminal or command line interface on your Linux system.

Navigate to the directory where the shell script file is located using the cd command. For example, if the file is located in the "/tmp/" folder, you would type:

cd /tmp/

Check the file permissions using the Is -I command.

ls -1

Make sure that the file has the execute permission set for the user running the script. For example, if the file is named "my-script.sh", you can check the permissions using:

ls -l myscript.sh

If the execute permission is not set, you can set it using the chmod command:

chmod +x -v my-script.sh

Run the shell script by typing the	the following command	:נ
------------------------------------	-----------------------	----

./my-script.sh

This will execute the shell script in the current shell session. You may need to modify the script to include the appropriate interpreter (such as bash) at the beginning of the file, depending on how the script was written. For example:

#!/bin/bash

In this case, you would run the script using the interpreter, such as

bash my-script.sh

reply link

Leave a Reply

Your email address will not be published. Required fields are marked *

Comment *

Name

Post Comment

Use HTML -... for code samples. Your comment will appear only after approval by the site admin.

Next FAQ: Change MySQL root password

Previous FAQ: Install Multimedia Codecs For Ubuntu Linux







SEARCH

To search, type & hit enter...



FEATURED ARTICLES

0 Cool Open S	Source Software I	Discovered in	2013
	0 Cool Open S	0 Cool Open Source Software I	0 Cool Open Source Software I Discovered in

- 2 30 Handy Bash Shell Aliases For Linux / Unix / Mac OS X
- Top 32 Nmap Command Examples For Linux Sys/Network Admins
- 25 PHP Security Best Practices For Linux Sys Admins
- 5 30 Linux System Monitoring Tools Every SysAdmin Should Know
- 6 40 Linux Server Hardening Security Tips
- Linux: 25 Iptables Netfilter Firewall Examples For New SysAdmins

- Top 20 OpenSSH Server Best Security Practices
- 9 Top 25 Nginx Web Server Best Security Practices
- 10 My 10 UNIX Command Line Mistakes



SIGN UP FOR MY NEWSLETTER

Get the latest tutorials on Linux,

SysAdmin and Open Source topics
in your INBOX. It's free.

SIGN UP

Linux shell scripting tutorial



RSS/Feed



About nixCraft











©2002-2023 nixCraft • Privacy • ToS • Contact/Email • Corporate patron Linode & Cloudflare











