grep Utility (Global Regular Expression Print)

Grep stands for Global Regular Expression Print. The grep command is used to search for a text in a file by pattern matching based on regular expression.

It is develope by Ken Thompson and applied on unix kernel

 cmd: grep

SYNTAX:

 # grep <option> <pattern> <filename>

options:

-i   → case insensitive
-I   → case sensitive
-n   → print with line number
-w   → word (exact matching pattern)
-m   →stops after the specified matting pattern
 -v   →invert match
-V   → version
-o   → display the only matching pattern
-c   → print no. of lines having matching pattern
-r   → recursive (for directories)
-x   → search the matching line
-l   → print files having matching pater
-L   → print files not having matching pattern
-A   →After, print specified lines after the matching patter
-B   → Before, print specified lines before the matching patter
-C   →Centre, print specified lines before and after the matching patter

EG:

[root@servera ~]# ls

anaconda-ks.cfg Desktop   Downloads Music   Pictures redhat1 Templates Videos

anafile   Documents file.txt newabc1 Public   red.txt user.txt

 [root@servera ~]# vim anaconda-ks.cfg

 [root@servera ~]# **grep root anaconda-ks.cfg**

rootpw --iscrypted
6KjtX7FtW6p9gbdHA$OL1ZwGWXlnOSfryuS4tEt.E0rAHGGG2Ksco5shqqlXyrU1gR2DoERfzs.DAS1Xs
vrq/hPBg2nb0YxcNPJNOpn1

 [root@servera ~]# **grep ROOT anaconda-ks.cfg**

 [root@servera ~]# **grep Root anaconda-ks.cfg**

Root password

[root@servera ~]# **grep -i ROOT anaconda-ks.cfg**

Root password

rootpw --iscrypted
6KjtX7FtW6p9gbdHA$OL1ZwGWXlnOSfryuS4tEt.E0rAHGGG2Ksco5shqqlXyrU1gR2DoERfzs.DAS1Xs
vrq/hPBg2nb0YxcNPJNOpn1

[root@servera ~]# **grep -I ROOT anaconda-ks.cfg**

[root@servera ~]# **grep   -V**

grep (GNU grep) 3.6

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Written by Mike Haertel and others; see

<https://git.sv.gnu.org/cgit/grep.git/tree/AUTHORS>.

[root@servera ~]# **grep root anaconda-ks.cfg**

rootpw --iscrypted
6KjtX7FtW6p9gbdHA$OL1ZwGWXlnOSfryuS4tEt.E0rAHGGG2Ksco5shqqlXyrU1gR2DoERfzs.DAS1Xs
vrq/hPBg2nb0YxcNPJNOpn1

[root@servera ~]# **grep -n   root anaconda-ks.cfg**

39:**root**pw --iscrypted
6KjtX7FtW6p9gbdHA$OL1ZwGWXlnOSfryuS4tEt.E0rAHGGG2Ksco5shqqlXyrU1gR2DoERfzs.DAS1Xs
vrq/hPBg2nb0YxcNPJNOpn1

[root@servera ~]# **grep -o   root anaconda-ks.cfg**

root

[root@servera ~]# **grep -c   root anaconda-ks.cfg**

1

```
[root@servera ~]# grep -c -i  root  anaconda-ks.cfg
2
[root@servera ~]# vim  anaconda-ks.cfg
[root@servera ~]# grep -c -i  root  anaconda-ks.cfg
2
[root@servera ~]# grep  -w  root  anaconda-ks.cfg
# Root password  root root
[root@servera ~]# grep  -nw  root  anaconda-ks.cfg
38:# Root password  root root
[root@servera ~]# grep  boot anaconda-ks.cfg
# Run the Setup Agent on first boot
firstboot --enable


[root@servera ~]# grep  oo anaconda-ks.cfg
# Run the Setup Agent on first boot
firstboot --enable
# Root password  root root
rootpw --iscrypted
$6$KjtX7FtW6p9gbdHA$OL1ZwGWXlnOSfryuS4tEt.E0rAHGGG2Ksco5shqqlXyrU1gR2DoERfzs.DAS1Xs
vrq/hPBg2nb0YxcNPJNOpn1


[root@servera ~]# grep -m  2   oo anaconda-ks.cfg
# Run the Setup Agent on first boot
firstboot --enable


[root@servera ~]# grep -o   oo anaconda-ks.cfg
oo
oo
oo
oo
oo
oo
```

```
[root@servera ~]# grep -o  root anaconda-ks.cfg
```

root

root

root


```
[root@servera ~]# grep -vn  root anaconda-ks.cfg
```


```
[root@servera ~]# grep  -A 2  root   anaconda-ks.cfg
```

Root password root root

rootpw --iscrypted
6KjtX7FtW6p9gbdHA$OL1ZwGWXlnOSfryuS4tEt.E0rAHGGG2Ksco5shqqlXyrU1gR2DoERfzs.DAS1Xs
vrq/hPBg2nb0YxcNPJNOpn1

user --groups=wheel --name=sushmita --
password=6EMh9QzchSuR4w6B7$t/tev7jqPZF6JGZYumuSiaA72/1yaDpdxjjzLOXzZUTUvitwzzvldLb
VQo3649TR9/RskmfEYGXa0nsE9/WL/1 --iscrypted --gecos="sushmita"


```
[root@servera ~]# grep  -nA 2  root   anaconda-ks.cfg
```

38:# Root password **root root**

39:**root**pw --iscrypted
6KjtX7FtW6p9gbdHA$OL1ZwGWXlnOSfryuS4tEt.E0rAHGGG2Ksco5shqqlXyrU1gR2DoERfzs.DAS1Xs
vrq/hPBg2nb0YxcNPJNOpn1

40-user --groups=wheel --name=sushmita --
password=6EMh9QzchSuR4w6B7$t/tev7jqPZF6JGZYumuSiaA72/1yaDpdxjjzLOXzZUTUvitwzzvldLb
VQo3649TR9/RskmfEYGXa0nsE9/WL/1 --iscrypted --gecos="sushmita"

41-


```
[root@servera ~]# grep  -nB 2  root   anaconda-ks.cfg
```

36-timezone Asia/Kolkata --utc

37-

38:# Root password **root root**

39:**root**pw --iscrypted
6KjtX7FtW6p9gbdHA$OL1ZwGWXlnOSfryuS4tEt.E0rAHGGG2Ksco5shqqlXyrU1gR2DoERfzs.DAS1Xs
vrq/hPBg2nb0YxcNPJNOpn1

[root@servera ~]# **grep -nC 2 root   anaconda-ks.cfg**

36-timezone Asia/Kolkata --utc

37-

40-user --groups=wheel --name=sushmita --password=6EMh9QzchSuR4w6B7$t/tev7jqPZF6JGZYumuSiaA72/1yaDpdxjjzLOXzZUTUvitwzzvldLbVQo3649TR9/RskmfEYGXa0nsE9/WL/1 --iscrypted --gecos="sushmita"

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######################################

 [root@servera ~]# ls

anaconda-ks.cfg Desktop   Downloads Music   Pictures redhat1 Templates Videos

anafile   Documents file.txt newabc1 Public   red.txt user.txt

 [root@servera ~]# mkdir   data

[root@servera ~]# touch data/{apple,abc,test,sample}

[root@servera ~]# vim data/apple

 [root@servera ~]# vim data/abc

 [root@servera ~]# vim data/test

 [root@servera ~]# cat data/apple

hello World

hello Hello

Hello World

redhat certified

[root@servera ~]# cat data/test

system user

```
[root@servera ~]# cat data/abc

hello
system admin
HELLO WORLD
hello  world

 [root@servera ~]# grep  hello  data
grep: data: Is a directory

 [root@servera ~]# grep  -r  hello  data
data/apple:hello World
data/apple:hello Hello
data/abc:hello
data/abc:hello  world

 [root@servera ~]# grep  -l  hello data/
grep: data/: Is a directory

 [root@servera ~]# grep  -l -r  hello data/
data/apple
data/abc

 [root@servera ~]# grep  -L -r  hello  data
data/sample
data/test

 [root@servera ~]# grep  -x   hello world   data
grep: world: No such file or directory
grep: data: Is a directory
```

```
[root@servera ~]# grep  -rx    hello world    data
grep: world: No such file or directory
data/abc:hello


[root@servera ~]# grep  -rx    "hello  world"    data
data/abc:hello  world


[root@servera ~]# grep   hello   data   anaconda-ks.cfg
grep: data: Is a directory


[root@servera ~]# grep   hello   data/abc   anaconda-ks.cfg
data/abc:hello
data/abc:hello  world


[root@servera ~]# cd data/
[root@servera data]# grep   hello  *
abc:hello
abc:hello  world
apple:hello World
apple:hello Hello
[root@servera data]# grep   hello   apple   test abc
apple:hello World
apple:hello Hello
abc:hello
abc:hello  world
[root@servera data]# cd
####################################################
[root@servera ~]# ls
anaconda-ks.cfg data    Documents file.txt newabc1  Public  red.txt   user.txt
anafile       Desktop Downloads Music    Pictures redhat1 Templates Videos
```

```
[root@servera ~]# grep  ana   /root
grep: /root: Is a directory

[root@servera ~]# grep  -r  ana   /root
[root@servera ~]# ls /root/
anaconda-ks.cfg data    Documents file.txt newabc1  Public  red.txt   user.txt
anafile        Desktop Downloads Music    Pictures redhat1 Templates Videos

[root@servera ~]# ls    |   grep  ana
anaconda-ks.cfg
anafile

[root@servera ~]# ls    |   grep  red
redhat1
red.txt
[root@servera ~]# ls /
afs  centos data      etc lib  mnt     proc  run      sbin test1 ubantu
bin  class  destination home lib64 newlinux redhat sample.txt srv   test2 usr
boot common dev       kali media opt     root  sam.txt   sys tmp   var

[root@servera ~]# ls /  |  grep de
destination
dev

[root@servera ~]# head /etc/passwd
root:x:0:0:root:/root:/bin/bash
bin:x:1:1:bin:/bin:/sbin/nologin
daemon:x:2:2:daemon:/sbin:/sbin/nologin
adm:x:3:4:adm:/var/adm:/sbin/nologin
lp:x:4:7:lp:/var/spool/lpd:/sbin/nologin
sync:x:5:0:sync:/sbin:/bin/sync
```

```
shutdown:x:6:0:shutdown:/sbin:/sbin/shutdown

halt:x:7:0:halt:/sbin:/sbin/halt

mail:x:8:12:mail:/var/spool/mail:/sbin/nologin

operator:x:11:0:operator:/root:/sbin/nologin


[root@servera ~]# grep  sush /etc/passwd

sushmita:x:1000:1004:sushmita:/home/sushmita:/bin/bash

sushil:x:1005:1006::/home/sushil:/bin/bash


[root@servera ~]# grep  sushmita /etc/passwd

sushmita:x:1000:1004:sushmita:/home/sushmita:/bin/bash


[root@servera ~]# #####################################


[root@servera ~]# #grep  xxxxxx  file1  file2  file2   file4


[root@servera ~]# grep  sushmita /etc/passwd

sushmita:x:1000:1004:sushmita:/home/sushmita:/bin/bash


[root@servera ~]# grep  sushmita /etc/passwd   >   grepfile

[root@servera ~]# ls

anaconda-ks.cfg data   Documents file.txt Music   Pictures redhat1 Templates Videos

anafile      Desktop Downloads grepfile newabc1 Public   red.txt user.txt


[root@servera ~]# cat grepfile

sushmita:x:1000:1004:sushmita:/home/sushmita:/bin/bash


[root@servera ~]# ############################

[root@servera ~]# ls  /  |  grep   de

destination

dev
```
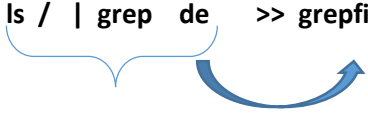
```
[root@servera ~]# ls /  | grep   de     >> grepfile

[root@servera ~]# cat  grepfile

sushmita:x:1000:1004:sushmita:/home/sushmita:/bin/bash

destination

dev
```

```
 93  #eg:

 94  ls

 95  vim anaconda-ks.cfg

 96  grep  root  anaconda-ks.cfg

 97  grep  ROOT  anaconda-ks.cfg

 98  grep  Root  anaconda-ks.cfg

 99  grep  -i  ROOT  anaconda-ks.cfg

100  grep  -I  ROOT  anaconda-ks.cfg

101  grep   -V

102  grep  root  anaconda-ks.cfg

103  grep -n   root  anaconda-ks.cfg

104  grep -o   root  anaconda-ks.cfg

105  grep -c   root  anaconda-ks.cfg

106  grep -c -i   root  anaconda-ks.cfg

107  vim  anaconda-ks.cfg

108  grep -c -i   root  anaconda-ks.cfg

109  grep  -w  root   anaconda-ks.cfg

110  grep  -nw  root   anaconda-ks.cfg

111  grep  boot anaconda-ks.cfg

112  grep  oo anaconda-ks.cfg

113  grep -m  2   oo anaconda-ks.cfg

114  grep -o   oo anaconda-ks.cfg

115  grep -o  root anaconda-ks.cfg
```

```
116  grep -vn  root anaconda-ks.cfg

117  grep  -A 2  root   anaconda-ks.cfg

118  grep  -nA 2  root   anaconda-ks.cfg

119  grep  -nB 2  root   anaconda-ks.cfg

120  grep  -nC 2  root   anaconda-ks.cfg

121  #####################################3

122  ls

123  mkdir   data

124  touch  data/{apple,abc,test,sample}

125  vim  data/apple

126  vim  data/abv

127  vim  data/abc

128  vim  data/test

129  cat data/apple

130  cat data/test

131  cat data/abc

132  grep  hello  data

133  grep  -r  hello  data

134  grep  -l  hello data/

135  grep  -l -r  hello data/

136  grep  -L -r  hello  data

137  grep  -x   hello world   data

138  grep  -rx   hello world   data

139  grep  -rx   "hello world"   data

140  grep  -rx   "hello  world"   data

141  grep  hello   data  anaconda-ks.cfg

142  grep  hello   data/abc  anaconda-ks.cfg

143  cd data/

144  grep  hello  *

145  grep  hello   apple   test abc

146  cd
```

```
147  ########################################################
148  ls
149  grep  ana  /root
150  grep  -r  ana  /root
151  ls /root/
152  ls    |   grep  ana
153  ls    |   grep  red
154  ls /
155  ls /  |  grep  de
156  semanage  fcontext  -l
157  semanage  fcontext  -l |  grep  http
158  cat /etc/passwd
159  tail /etc/passwd
160  head /etc/passwd
161  grep  sush /etc/passwd
162  grep  sushmita /etc/passwd
163  ###########################################
164  #grep  xxxxxx  file1 file2 file2   file4
165  ############################
166  grep  sushmita /etc/passwd
167  grep  sushmita /etc/passwd   >   grepfile
168  ls
169  cat grepfile
170  ############################
171  ls /  |  grep   de
172  ls /  |  grep   de    >>  grepfile
173  cat  grepfile
174  ##############################
175  history
[root@servera ~]#
```