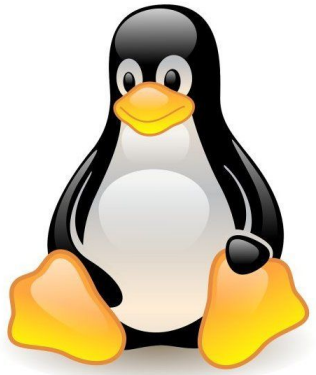
Text Editors



Linux Essentials
Session-5

Text Editors

Vim Editor

Vim Editor

vim filename

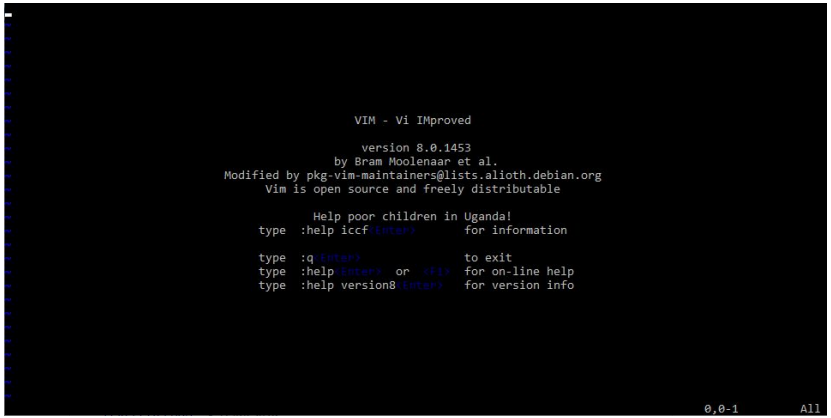
- Vim is a powerful text editor used in CLI (command line interface).
- Vim is an editor to create or edit a text file.

Insert Mode

- You cannot write text in command mode. To write text into a file, there is a dedicated insert mode. When you want to write something on a file, you must enter the insert mode.

Command Mode

- When you start Vim, you are placed in Command mode. In this mode, you can move across the screen, delete text and copy text.



Vim Editor

Vim Command	Decription
i	Enter insert mode
Esc	Enter command mode
x or Del	Delete a character
X	Delete character is backspace mode
u	Undo changes
Ctrl + r	Redo changes
yy	Copy a line
dd	Delete a line
p	Paste the content of the buffer
[[or gg	Move to the beginning of a file
]] or G	Move to the end of a file
:%s/foo/bar/g	Search and replace all occurrences
Esc + :w	Save changes
Esc + :wq or Esc + ZZ	Save and quit Vim

Nano Editor

Nano Editor

GNU nano is a small and friendly text editor.
Besides basic text editing, nano offers features like:

- undo/redo
- syntax coloring
- interactive search-and-replace
- auto-indentation
- line numbers
- word completion
- file locking, backup files
- internationalization support.

Nano Editor

- Unlike vim, nano is a modeless editor, which means that you can start typing and editing the text immediately after opening the file.
- To open an existing file or to create a new file, type nano followed by the file name.

```
nano filename
```

Nano Command	Meaning
Ctrl G	Get Help
Ctrl X	Exit
Ctrl O	Write Out
Ctrl R	Read File
Ctrl W	Where Is
Ctrl \	Replace
Ctrl K	Cut Text
Ctrl U	Uncut Text
Ctrl J	Justify
Ctrl T	To Spell
Ctrl C	Cur Pos
Alt U	Undo
Alt E	Redo


Kahoot!

THANKS!


3
Ping & SSH Command

Ping Command

Ping or Packet Internet Groper is a network administration utility used to check the connectivity status between a source and a destination device.

ping host-name/IP

```
ping 54.93.34.220
```

```
gakeko2018@DESKTOP-JAO7K2U:~$ ping 54.93.34.220
PING 54.93.34.220 (54.93.34.220) 56(84) bytes of data.
64 bytes from 54.93.34.220: icmp_seq=1 ttl=243 time=62.6 ms
64 bytes from 54.93.34.220: icmp_seq=2 ttl=243 time=93.5 ms
64 bytes from 54.93.34.220: icmp_seq=3 ttl=243 time=66.8 ms
64 bytes from 54.93.34.220: icmp_seq=4 ttl=243 time=67.6 ms
64 bytes from 54.93.34.220: icmp_seq=5 ttl=243 time=62.7 ms
64 bytes from 54.93.34.220: icmp_seq=7 ttl=243 time=84.6 ms
64 bytes from 54.93.34.220: icmp_seq=8 ttl=243 time=64.6 ms
64 bytes from 54.93.34.220: icmp_seq=9 ttl=243 time=72.0 ms
```

Ping Command

The `ping` command is one of the most used utilities for troubleshooting, testing, and diagnosing network connectivity issues.

Ping works by sending one or more ICMP (Internet Control Message Protocol) Echo Request packages to a specified destination IP on the network and waits for a reply. When the destination receives the package, it will respond back with an ICMP echo reply.

With the `ping` command, you can determine whether a remote destination IP is active or inactive. You can also find the round-trip delay in communicating with the destination and check whether there is a packet loss.

Ping Command

The `ping` command resolves the domain name into an IP address and starts sending ICMP packages to the destination IP. If the destination IP is reachable it will respond back and the ping command prints a line that includes the following fields:

- The number of data bytes. 64 ICMP data bytes - `64 bytes`
- The IP address of the destination - `from ….`
- The ICMP sequence number for each packet. `icmp_seq=1`
- The Time to Live. - `ttl=53`
- The ping time, measured in milliseconds which is the round trip time for the packet to reach the host, and for the response to return to the sender. - `time=41.4 ms`

By default, the interval between sending a new packet is one second.

The `ping` command will continue to send ICMP packages to the Destination IP address until it receives an interrupt. To stop the command, just hit the `Ctrl`+C key combination.

Ping Command

```
$ ping clarusway.com

Pinging clarusway.com [54.164.151.235] with 32 bytes of data:
Reply from 54.164.151.235: bytes=32 time=132ms TTL=237
Reply from 54.164.151.235: bytes=32 time=130ms TTL=237
Reply from 54.164.151.235: bytes=32 time=130ms TTL=237
Reply from 54.164.151.235: bytes=32 time=130ms TTL=237

Ping statistics for 54.164.151.235:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 130ms, Maximum = 132ms, Average = 130ms
```

```
$ ping www.google.com

Pinging www.google.com [172.217.169.132] with 32 bytes of data:
Reply from 172.217.169.132: bytes=32 time=19ms TTL=116
Reply from 172.217.169.132: bytes=32 time=18ms TTL=116
Reply from 172.217.169.132: bytes=32 time=18ms TTL=116
Reply from 172.217.169.132: bytes=32 time=19ms TTL=116

Ping statistics for 172.217.169.132:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 18ms, Maximum = 19ms, Average = 18ms
```

Ping Command

```
$ ping 54.164.151.235

Pinging 54.164.151.235 with 32 bytes of data:
Reply from 54.164.151.235: bytes=32 time=131ms TTL=237
Reply from 54.164.151.235: bytes=32 time=130ms TTL=237
Reply from 54.164.151.235: bytes=32 time=130ms TTL=237
Reply from 54.164.151.235: bytes=32 time=130ms TTL=237

Ping statistics for 54.164.151.235:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 130ms, Maximum = 131ms, Average = 130ms
```

SSH Command

* ssh stands for “Secure Shell”.
* It is a protocol used to securely connect to a remote server/system.

ssh user@host(IP/Domain_name)

```
ssh -i cert.pem ec2-user@54.93.34.220
```

```
gakeko2018@DESKTOP-JAO7K2U:~$ ssh -i cert.pem ec2-user@54.93.34.220
The authenticity of host '54.93.34.220 (54.93.34.220)' can't be established.
ECDSA key fingerprint is SHA256:lvCnUtJiig4s2U4aojBonZOSbzGPBMOpB9yPPoGjVEo.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '54.93.34.220' (ECDSA) to the list of known hosts.

       __|  __|_  )
       _|  (     /   Amazon Linux 2 AMI
      ___|\___|___|

https://aws.amazon.com/amazon-linux-2/
2 package(s) needed for security, out of 13 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-172-31-35-15 ~]$
```