PARSHVANATH CHARITABLE TRUST'S

A. P. SHAH INSTITUTE OF TECHNOLOGY

Department of Information Technology

(NBA Accredited)

Department of Information Technology

Academic Year: 2025-26
Semester: V
Class / Branch: TEIT/Div C
Subject: Security Lab
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Date of Performance: 09/10/2025
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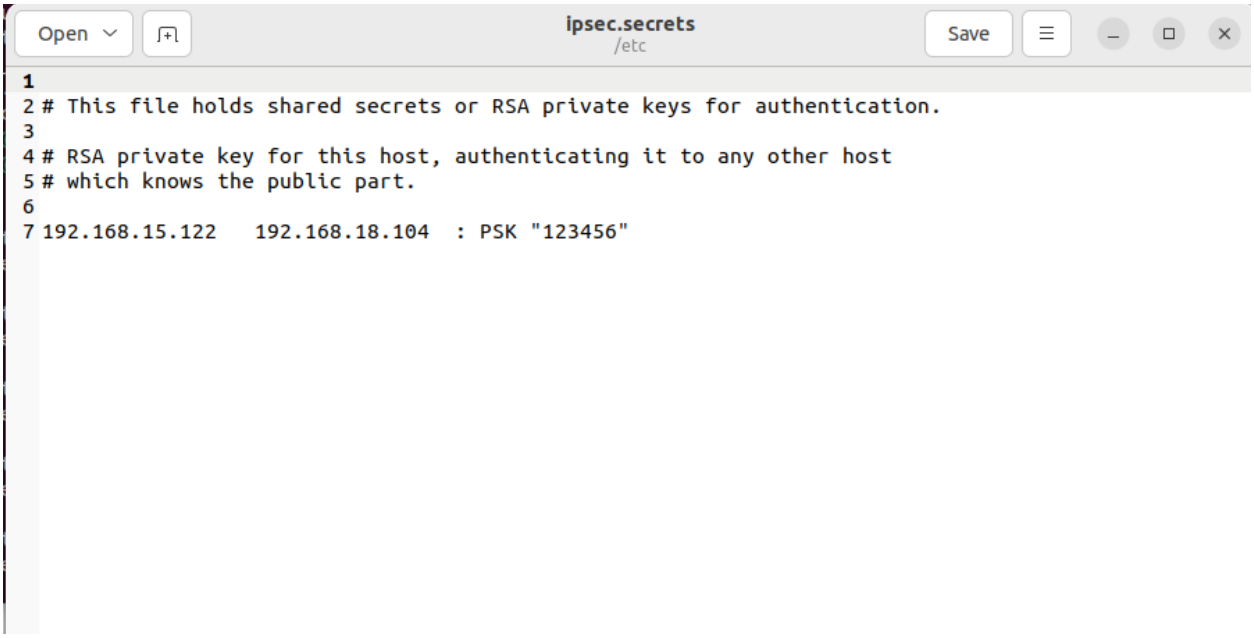
Experiment No. 7

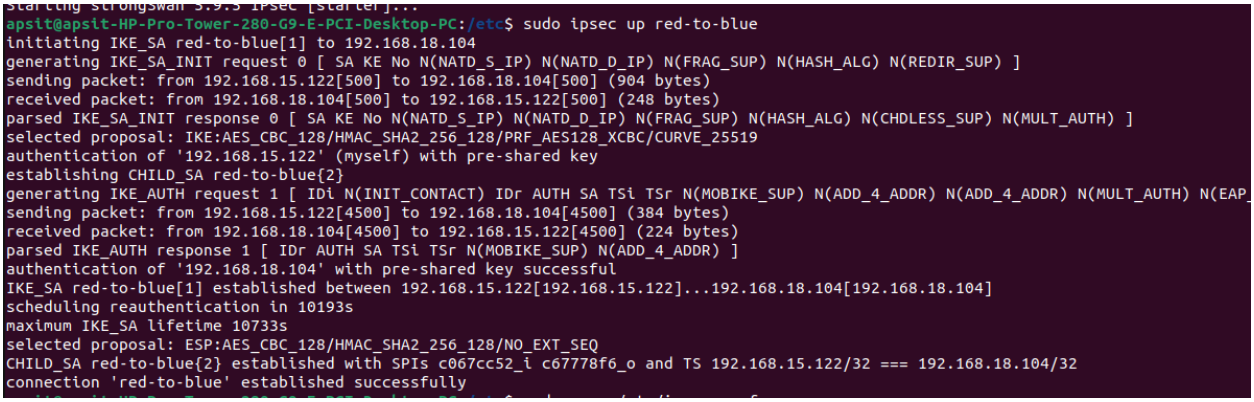
Aim: To study and implement IPSEC in Linux.

Screenshots:

```
apsit@apsit-HP-Pro-Tower-280-G9-E-PCI-Desktop-PC:~$ sudo apt-get update
Ign:1 https://pkg.jenkins.io/debian-stable binary/ InRelease
Get:2 https://pkg.jenkins.io/debian-stable binary/ Release [2,044 B]
Get:3 https://pkg.jenkins.io/debian-stable binary/ Release.gpg [833 B]
Hit:4 https://deb.nodesource.com/node_22.x nodistro InRelease
Err:3 https://pkg.jenkins.io/debian-stable binary/ Release.gpg
  The following signatures couldn't be verified because the public key is not av
ailable: NO_PUBKEY 5BA31D57EF5975CA
Hit:5 https://dl.google.com/linux/chrome/deb stable InRelease
Hit:6 http://in.archive.ubuntu.com/ubuntu jammy InRelease
Get:7 http://in.archive.ubuntu.com/ubuntu jammy-updates InRelease [128 kB]
Hit:8 http://security.ubuntu.com/ubuntu jammy-security InRelease
Hit:9 http://in.archive.ubuntu.com/ubuntu jammy-backports InRelease
Hit:10 https://packages.microsoft.com/repos/code stable InRelease
Fetched 129 kB in 3s (40.2 kB/s)
Reading package lists... Done
W: An error occurred during the signature verification. The repository is not up
dated and the previous index files will be used. GPG error: https://pkg.jenkins.
io/debian-stable binary/ Release: The following signatures couldn't be verified
because the public key is not available: NO_PUBKEY 5BA31D57EF5975CA
W: Failed to fetch https://pkg.jenkins.io/debian-stable/binary/Release.gpg  The
following signatures couldn't be verified because the public key is not availabl
e: NO_PUBKEY 5BA31D57EF5975CA
W: Some index files failed to download. They have been ignored, or old ones used
```

```
apsit@apsit-HP-Pro-Tower-280-G9-E-PCI-Desktop-PC:~$ sudo apt-get install strongs
wan strongswan-starter
[sudo] password for apsit:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
strongswan is already the newest version (5.9.5-2ubuntu2.3).
strongswan-starter is already the newest version (5.9.5-2ubuntu2.3).
The following packages were automatically installed and are no longer required:
  gyp libjs-events libjs-highlight.js libjs-inherits libjs-is-typedarray
  libjs-psl libjs-source-map libjs-sprintf-js libjs-typedarray-to-buffer
  libnode-dev libssl-dev libuv1-dev node-abab node-abbrev node-agent-base
  node-ansi-regex node-ansi-styles node-ansistyles node-aproba node-archy
  node-are-we-there-yet node-argparse node-arrify node-asap node-asynckit
  node-balanced-match node-brace-expansion node-builtins node-chalk
  node-chownr node-clean-yaml-object node-cli-table node-clone
  node-color-convert node-color-name node-colors node-columnify
  node-combined-stream node-commander node-console-control-strings
  node-core-util-is node-cssom node-cssstyle node-debug
  node-decompress-response node-defaults node-delayed-stream node-delegates
  node-depd node-diff node-encoding node-end-of-stream node-err-code
  node-escape-string-regexp node-events node-fancy-log node-foreground-child
  node-fs-write-stream-atomic node-fs.realpath node-function-bind node-gauge
  node-get-stream node-glob node-got node-graceful-fs node-growl node-has-flag
```





Conclusion:

in this experiment, we learnt and understood to implement IPSEC in Linux .