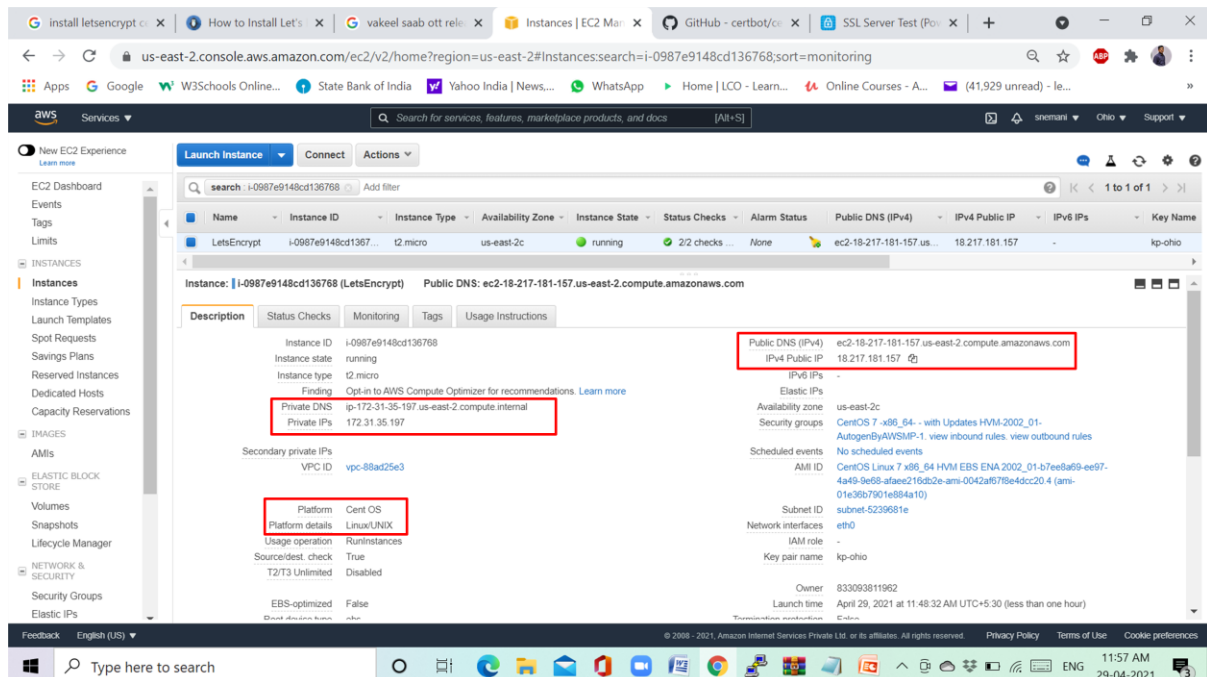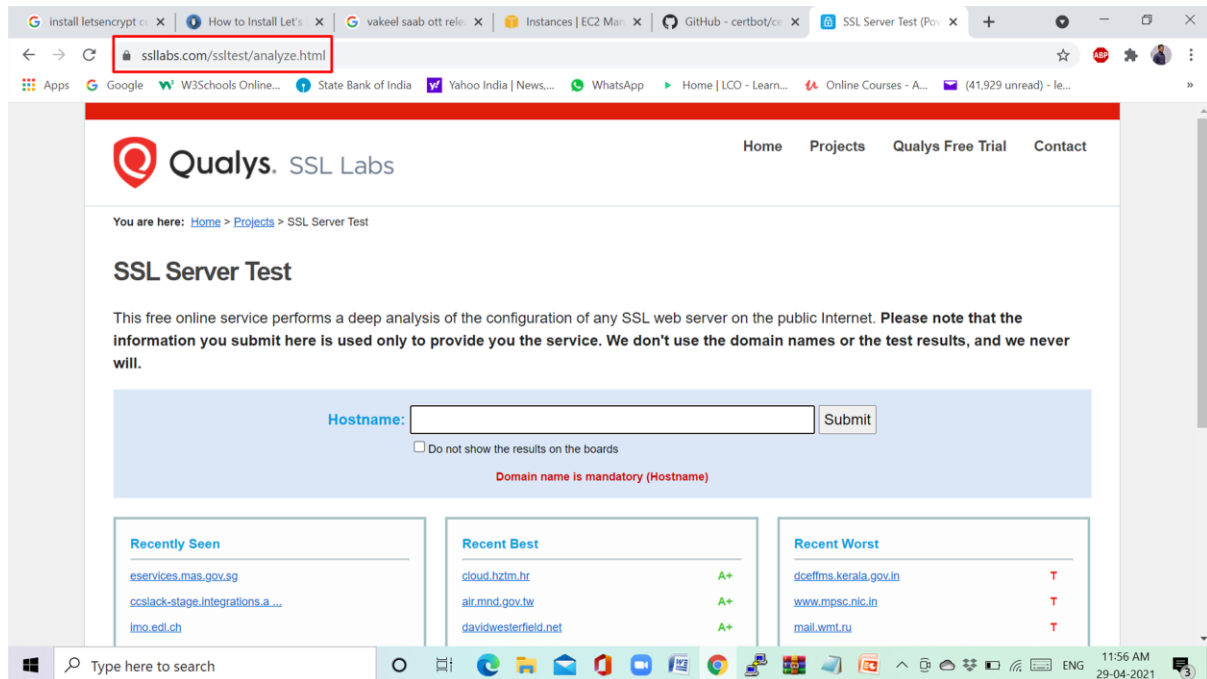**AWS Project: -13**
Project Date: – 29.04.2021
Prepared by: – Sarveswara Sarma Nemani

Q:- Create a public web server and hosting with one domain and install letsencrypt or certboot ssl certificate in server (Observation : Must be ping your domain its should be secure i.e https)/ **SSL for ec2-web hosting server**)

Sol:

Terminal Logs: -

login as: centos
Authenticating with public key "imported-openssh-key"

```
[centos@ip-172-31-35-197 ~]$ sudo -i
[root@ip-172-31-35-197 ~]# yum install httpd -y
Loaded plugins: fastestmirror
Determining fastest mirrors
 * base: d36uatko69830t.cloudfront.net
 * extras: d36uatko69830t.cloudfront.net
 * updates: d36uatko69830t.cloudfront.net
base                                    | 3.6 kB     00:00
extras                                  | 2.9 kB     00:00
updates                                  | 2.9 kB     00:00
(1/4): base/7/x86_64/group_gz                      | 153 kB   00:00
(2/4): extras/7/x86_64/primary_db                  | 232 kB   00:00
(3/4): updates/7/x86_64/primary_db                  | 7.1 MB   00:00
(4/4): base/7/x86_64/primary_db                     | 6.1 MB   00:01
Resolving Dependencies
--> Running transaction check
---> Package httpd.x86_64 0:2.4.6-97.el7.centos will be installed
--> Processing Dependency: httpd-tools = 2.4.6-97.el7.centos for package: httpd-
2.4.6-97.el7.centos.x86_64
--> Processing Dependency: system-logos >= 7.92.1-1 for package: httpd-2.4.6-97.
el7.centos.x86_64
--> Processing Dependency: /etc/mime.types for package: httpd-2.4.6-97.el7.cento
s.x86_64
--> Processing Dependency: libaprutil-1.so.0()(64bit) for package: httpd-2.4.6-9
7.el7.centos.x86_64
--> Processing Dependency: libapr-1.so.0()(64bit) for package: httpd-2.4.6-97.el
7.centos.x86_64
--> Running transaction check
---> Package apr.x86_64 0:1.4.8-7.el7 will be installed
---> Package apr-util.x86_64 0:1.5.2-6.el7 will be installed
---> Package centos-logos.noarch 0:70.0.6-3.el7.centos will be installed
---> Package httpd-tools.x86_64 0:2.4.6-97.el7.centos will be installed
---> Package mailcap.noarch 0:2.1.41-2.el7 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

=================================================================
===============
 Package          Arch      Version            Repository    Size
=================================================================
===============
Installing:
 httpd           x86_64    2.4.6-97.el7.centos      updates     2.7 M
Installing for dependencies:
 apr             x86_64    1.4.8-7.el7          base        104 k
 apr-util        x86_64    1.5.2-6.el7          base         92 k
 centos-logos    noarch     70.0.6-3.el7.centos      base         21 M
 httpd-tools      x86_64    2.4.6-97.el7.centos      updates       93 k
 mailcap         noarch    2.1.41-2.el7         base         31 k

Transaction Summary
=================================================================
===============
```

Install 1 Package (+5 Dependent packages)

Total download size: 24 M
Installed size: 32 M
Downloading packages:
warning: /var/cache/yum/x86_64/7/base/packages/apr-1.4.8-7.el7.x86_64.rpm: Heade
r V3 RSA/SHA256 Signature, key ID f4a80eb5: NOKEY
Public key for apr-1.4.8-7.el7.x86_64.rpm is not installed
(1/6): apr-1.4.8-7.el7.x86_64.rpm | 104 kB   00:00
(2/6): apr-util-1.5.2-6.el7.x86_64.rpm | 92 kB   00:00
(3/6): mailcap-2.1.41-2.el7.noarch.rpm | 31 kB   00:00
Public key for httpd-tools-2.4.6-97.el7.centos.x86_64.rpm is not installed
(4/6): httpd-tools-2.4.6-97.el7.centos.x86_64.rpm | 93 kB   00:00
(5/6): httpd-2.4.6-97.el7.centos.x86_64.rpm | 2.7 MB   00:00
(6/6): centos-logos-70.0.6-3.el7.centos.noarch.rpm | 21 MB   00:00

Total   25 MB/s | 24 MB 00:00
Retrieving key from file:///etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
Importing GPG key 0xF4A80EB5:
 Userid   : "CentOS-7 Key (CentOS 7 Official Signing Key) <security@centos.org
>"
 Fingerprint: 6341 ab27 53d7 8a78 a7c2 7bb1 24c6 a8a7 f4a8 0eb5
 Package   : centos-release-7-7.1908.0.el7.centos.x86_64 (installed)
 From   : /etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : apr-1.4.8-7.el7.x86_64   1/6
  Installing : apr-util-1.5.2-6.el7.x86_64   2/6
  Installing : httpd-tools-2.4.6-97.el7.centos.x86_64   3/6
  Installing : centos-logos-70.0.6-3.el7.centos.noarch   4/6
  Installing : mailcap-2.1.41-2.el7.noarch   5/6
  Installing : httpd-2.4.6-97.el7.centos.x86_64   6/6
  Verifying : mailcap-2.1.41-2.el7.noarch   1/6
  Verifying : apr-1.4.8-7.el7.x86_64   2/6
  Verifying : apr-util-1.5.2-6.el7.x86_64   3/6
  Verifying : httpd-2.4.6-97.el7.centos.x86_64   4/6
  Verifying : httpd-tools-2.4.6-97.el7.centos.x86_64   5/6
  Verifying : centos-logos-70.0.6-3.el7.centos.noarch   6/6

Installed:
  httpd.x86_64 0:2.4.6-97.el7.centos

Dependency Installed:
  apr.x86_64 0:1.4.8-7.el7
  apr-util.x86_64 0:1.5.2-6.el7
  centos-logos.noarch 0:70.0.6-3.el7.centos
  httpd-tools.x86_64 0:2.4.6-97.el7.centos
  mailcap.noarch 0:2.1.41-2.el7

Complete!
[root@ip-172-31-35-197 ~]# yum -y install mod_ssl
Loaded plugins: fastestmirror

```
Loading mirror speeds from cached hostfile
 * base: d36uatko69830t.cloudfront.net
 * extras: d36uatko69830t.cloudfront.net
 * updates: d36uatko69830t.cloudfront.net
Resolving Dependencies
--> Running transaction check
---> Package mod_ssl.x86_64 1:2.4.6-97.el7.centos will be installed
--> Finished Dependency Resolution

Dependencies Resolved

================================================================
==============
 Package      Arch      Version              Repository    Size
================================================================
==============
Installing:
 mod_ssl      x86_64    1:2.4.6-97.el7.centos    updates    114 k

Transaction Summary
================================================================
==============
Install  1 Package

Total download size: 114 k
Installed size: 224 k
Downloading packages:
mod_ssl-2.4.6-97.el7.centos.x86_64.rpm              | 114 kB   00:00
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : 1:mod_ssl-2.4.6-97.el7.centos.x86_64              1/1
  Verifying  : 1:mod_ssl-2.4.6-97.el7.centos.x86_64              1/1

Installed:
  mod_ssl.x86_64 1:2.4.6-97.el7.centos

Complete!
[root@ip-172-31-35-197 ~]# systemctl start httpd.service
[root@ip-172-31-35-197 ~]# yum install epel-release
Loaded plugins: fastestmirror
Loading mirror speeds from cached hostfile
 * base: d36uatko69830t.cloudfront.net
 * extras: d36uatko69830t.cloudfront.net
 * updates: d36uatko69830t.cloudfront.net
Resolving Dependencies
--> Running transaction check
---> Package epel-release.noarch 0:7-11 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

================================================================
==============
 Package          Arch        Version      Repository    Size
================================================================
==============
```

```
================================================================
==============
Installing:
 epel-release        noarch       7-11       extras       15 k

Transaction Summary
================================================================
==============
Install  1 Package

Total download size: 15 k
Installed size: 24 k
Is this ok [y/d/N]: y
Downloading packages:
epel-release-7-11.noarch.rpm                    | 15 kB   00:00
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : epel-release-7-11.noarch                    1/1
  Verifying  : epel-release-7-11.noarch                     1/1

Installed:
  epel-release.noarch 0:7-11

Complete!
[root@ip-172-31-35-197 ~]# yum install git
Loaded plugins: fastestmirror
Loading mirror speeds from cached hostfile
epel/x86_64/metalink                    | 5.6 kB     00:00
 * base: d36uatko69830t.cloudfront.net
 * epel: mirror.math.princeton.edu
 * extras: d36uatko69830t.cloudfront.net
 * updates: d36uatko69830t.cloudfront.net
epel                                  | 4.7 kB     00:00
(1/3): epel/x86_64/group_gz               | 96 kB   00:00
(2/3): epel/x86_64/updateinfo             | 1.0 MB   00:00
(3/3): epel/x86_64/primary_db             | 6.9 MB   00:01
Resolving Dependencies
--> Running transaction check
---> Package git.x86_64 0:1.8.3.1-23.el7_8 will be installed
--> Processing Dependency: perl-Git = 1.8.3.1-23.el7_8 for package: git-1.8.3.1-
23.el7_8.x86_64
--> Processing Dependency: perl >= 5.008 for package: git-1.8.3.1-23.el7_8.x86_6
4
--> Processing Dependency: perl(warnings) for package: git-1.8.3.1-23.el7_8.x86_
64
--> Processing Dependency: perl(vars) for package: git-1.8.3.1-23.el7_8.x86_64
--> Processing Dependency: perl(strict) for package: git-1.8.3.1-23.el7_8.x86_64
--> Processing Dependency: perl(lib) for package: git-1.8.3.1-23.el7_8.x86_64
--> Processing Dependency: perl(Term::ReadKey) for package: git-1.8.3.1-23.el7_8
.x86_64
--> Processing Dependency: perl(Git) for package: git-1.8.3.1-23.el7_8.x86_64
```

--> Processing Dependency: perl(Getopt::Long) for package: git-1.8.3.1-23.el7_8.x86_64

--> Processing Dependency: perl(File::stat) for package: git-1.8.3.1-23.el7_8.x86_64

--> Processing Dependency: perl(File::Temp) for package: git-1.8.3.1-23.el7_8.x86_64

--> Processing Dependency: perl(File::Spec) for package: git-1.8.3.1-23.el7_8.x86_64

--> Processing Dependency: perl(File::Path) for package: git-1.8.3.1-23.el7_8.x86_64

--> Processing Dependency: perl(File::Find) for package: git-1.8.3.1-23.el7_8.x86_64

--> Processing Dependency: perl(File::Copy) for package: git-1.8.3.1-23.el7_8.x86_64

--> Processing Dependency: perl(File::Basename) for package: git-1.8.3.1-23.el7_8.x86_64

--> Processing Dependency: perl(Exporter) for package: git-1.8.3.1-23.el7_8.x86_64

--> Processing Dependency: perl(Error) for package: git-1.8.3.1-23.el7_8.x86_64

--> Processing Dependency: /usr/bin/perl for package: git-1.8.3.1-23.el7_8.x86_64

--> Running transaction check

---> Package perl.x86_64 4:5.16.3-299.el7_9 will be installed

--> Processing Dependency: perl-libs = 4:5.16.3-299.el7_9 for package: 4:perl-5.16.3-299.el7_9.x86_64

--> Processing Dependency: perl(Socket) >= 1.3 for package: 4:perl-5.16.3-299.el7_9.x86_64

--> Processing Dependency: perl(Scalar::Util) >= 1.10 for package: 4:perl-5.16.3-299.el7_9.x86_64

--> Processing Dependency: perl-macros for package: 4:perl-5.16.3-299.el7_9.x86_64

--> Processing Dependency: perl-libs for package: 4:perl-5.16.3-299.el7_9.x86_64

--> Processing Dependency: perl(threads::shared) for package: 4:perl-5.16.3-299.el7_9.x86_64

--> Processing Dependency: perl(threads) for package: 4:perl-5.16.3-299.el7_9.x86_64

--> Processing Dependency: perl(constant) for package: 4:perl-5.16.3-299.el7_9.x86_64

--> Processing Dependency: perl(Time::Local) for package: 4:perl-5.16.3-299.el7_9.x86_64

--> Processing Dependency: perl(Time::HiRes) for package: 4:perl-5.16.3-299.el7_9.x86_64

--> Processing Dependency: perl(Storable) for package: 4:perl-5.16.3-299.el7_9.x86_64

--> Processing Dependency: perl(Socket) for package: 4:perl-5.16.3-299.el7_9.x86_64

--> Processing Dependency: perl(Scalar::Util) for package: 4:perl-5.16.3-299.el7_9.x86_64

--> Processing Dependency: perl(Pod::Simple::XHTML) for package: 4:perl-5.16.3-299.el7_9.x86_64

--> Processing Dependency: perl(Pod::Simple::Search) for package: 4:perl-5.16.3-299.el7_9.x86_64

--> Processing Dependency: perl(Filter::Util::Call) for package: 4:perl-5.16.3-299.el7_9.x86_64

--> Processing Dependency: perl(Carp) for package: 4:perl-5.16.3-299.el7_9.x86_64

--> Processing Dependency: libperl.so()(64bit) for package: 4:perl-5.16.3-299.el7_9.x86_64

---> Package perl-Error.noarch 1:0.17020-2.el7 will be installed

---> Package perl-Exporter.noarch 0:5.68-3.el7 will be installed

---> Package perl-File-Path.noarch 0:2.09-2.el7 will be installed

---> Package perl-File-Temp.noarch 0:0.23.01-3.el7 will be installed

---> Package perl-Getopt-Long.noarch 0:2.40-3.el7 will be installed

--> Processing Dependency: perl(Pod::Usage) >= 1.14 for package: perl-Getopt-Long-2.40-3.el7.noarch

--> Processing Dependency: perl(Text::ParseWords) for package: perl-Getopt-Long-2.40-3.el7.noarch

---> Package perl-Git.noarch 0:1.8.3.1-23.el7_8 will be installed

---> Package perl-PathTools.x86_64 0:3.40-5.el7 will be installed

---> Package perl-TermReadKey.x86_64 0:2.30-20.el7 will be installed

--> Running transaction check

---> Package perl-Carp.noarch 0:1.26-244.el7 will be installed

---> Package perl-Filter.x86_64 0:1.49-3.el7 will be installed

---> Package perl-Pod-Simple.noarch 1:3.28-4.el7 will be installed

--> Processing Dependency: perl(Pod::Escapes) >= 1.04 for package: 1:perl-Pod-Simple-3.28-4.el7.noarch

--> Processing Dependency: perl(Encode) for package: 1:perl-Pod-Simple-3.28-4.el7.noarch

---> Package perl-Pod-Usage.noarch 0:1.63-3.el7 will be installed

--> Processing Dependency: perl(Pod::Text) >= 3.15 for package: perl-Pod-Usage-1.63-3.el7.noarch

--> Processing Dependency: perl-Pod-Perldoc for package: perl-Pod-Usage-1.63-3.el7.noarch

---> Package perl-Scalar-List-Utils.x86_64 0:1.27-248.el7 will be installed

---> Package perl-Socket.x86_64 0:2.010-5.el7 will be installed

---> Package perl-Storable.x86_64 0:2.45-3.el7 will be installed

---> Package perl-Text-ParseWords.noarch 0:3.29-4.el7 will be installed

---> Package perl-Time-HiRes.x86_64 4:1.9725-3.el7 will be installed

---> Package perl-Time-Local.noarch 0:1.2300-2.el7 will be installed

---> Package perl-constant.noarch 0:1.27-2.el7 will be installed

---> Package perl-libs.x86_64 4:5.16.3-299.el7_9 will be installed

---> Package perl-macros.x86_64 4:5.16.3-299.el7_9 will be installed

---> Package perl-threads.x86_64 0:1.87-4.el7 will be installed

---> Package perl-threads-shared.x86_64 0:1.43-6.el7 will be installed

--> Running transaction check

---> Package perl-Encode.x86_64 0:2.51-7.el7 will be installed

---> Package perl-Pod-Escapes.noarch 1:1.04-299.el7_9 will be installed

---> Package perl-Pod-Perldoc.noarch 0:3.20-4.el7 will be installed

--> Processing Dependency: perl(parent) for package: perl-Pod-Perldoc-3.20-4.el7.noarch

--> Processing Dependency: perl(HTTP::Tiny) for package: perl-Pod-Perldoc-3.20-4.el7.noarch

---> Package perl-podlators.noarch 0:2.5.1-3.el7 will be installed

--> Running transaction check

---> Package perl-HTTP-Tiny.noarch 0:0.033-3.el7 will be installed

---> Package perl-parent.noarch 1:0.225-244.el7 will be installed

--> Finished Dependency Resolution

Dependencies Resolved

```
==================================================================
===============
 Package              Arch      Version          Repository  Size
==================================================================
===============
Installing:
 git                  x86_64    1.8.3.1-23.el7_8    base       4.4 M
Installing for dependencies:
 perl                 x86_64    4:5.16.3-299.el7_9  updates    8.0 M
 perl-Carp            noarch    1.26-244.el7        base       19 k
 perl-Encode          x86_64    2.51-7.el7          base       1.5 M
 perl-Error           noarch    1:0.17020-2.el7     base       32 k
 perl-Exporter        noarch    5.68-3.el7          base       28 k
 perl-File-Path       noarch    2.09-2.el7          base       26 k
 perl-File-Temp       noarch    0.23.01-3.el7       base       56 k
 perl-Filter          x86_64    1.49-3.el7          base       76 k
 perl-Getopt-Long     noarch    2.40-3.el7          base       56 k
 perl-Git             noarch    1.8.3.1-23.el7_8    base       56 k
 perl-HTTP-Tiny       noarch    0.033-3.el7         base       38 k
 perl-PathTools       x86_64    3.40-5.el7          base       82 k
 perl-Pod-Escapes     noarch    1:1.04-299.el7_9    updates    52 k
 perl-Pod-Perldoc     noarch    3.20-4.el7          base       87 k
 perl-Pod-Simple      noarch    1:3.28-4.el7        base       216 k
 perl-Pod-Usage       noarch    1.63-3.el7          base       27 k
 perl-Scalar-List-Utils x86_64  1.27-248.el7        base       36 k
 perl-Socket          x86_64    2.010-5.el7         base       49 k
 perl-Storable        x86_64    2.45-3.el7          base       77 k
 perl-TermReadKey     x86_64    2.30-20.el7         base       31 k
 perl-Text-ParseWords noarch    3.29-4.el7          base       14 k
 perl-Time-HiRes      x86_64    4:1.9725-3.el7      base       45 k
 perl-Time-Local      noarch    1.2300-2.el7        base       24 k
 perl-constant        noarch    1.27-2.el7          base       19 k
 perl-libs            x86_64    4:5.16.3-299.el7_9  updates    690 k
 perl-macros          x86_64    4:5.16.3-299.el7_9  updates    44 k
 perl-parent          noarch    1:0.225-244.el7     base       12 k
 perl-podlators       noarch    2.5.1-3.el7         base       112 k
 perl-threads         x86_64    1.87-4.el7          base       49 k
 perl-threads-shared  x86_64    1.43-6.el7          base       39 k

Transaction Summary
==================================================================
===============
Install  1 Package (+30 Dependent packages)

Total download size: 16 M
Installed size: 59 M
Is this ok [y/d/N]: y
Downloading packages:
(1/31): perl-Carp-1.26-244.el7.noarch.rpm          | 19 kB   00:00
(2/31): perl-Encode-2.51-7.el7.x86_64.rpm          | 1.5 MB  00:00
(3/31): perl-Error-0.17020-2.el7.noarch.rpm        | 32 kB   00:00
(4/31): perl-Exporter-5.68-3.el7.noarch.rpm        | 28 kB   00:00
(5/31): perl-File-Path-2.09-2.el7.noarch.rpm       | 26 kB   00:00
```

```
(6/31): perl-File-Temp-0.23.01-3.el7.noarch.rpm          |  56 kB  00:00
(7/31): perl-Filter-1.49-3.el7.x86_64.rpm          |  76 kB  00:00
(8/31): perl-Getopt-Long-2.40-3.el7.noarch.rpm          |  56 kB  00:00
(9/31): perl-5.16.3-299.el7_9.x86_64.rpm          | 8.0 MB  00:00
(10/31): perl-Git-1.8.3.1-23.el7_8.noarch.rpm          |  56 kB  00:00
(11/31): perl-HTTP-Tiny-0.033-3.el7.noarch.rpm          |  38 kB  00:00
(12/31): perl-PathTools-3.40-5.el7.x86_64.rpm          |  82 kB  00:00
(13/31): perl-Pod-Perldoc-3.20-4.el7.noarch.rpm          |  87 kB  00:00
(14/31): perl-Pod-Simple-3.28-4.el7.noarch.rpm          | 216 kB  00:00
(15/31): perl-Pod-Usage-1.63-3.el7.noarch.rpm          |  27 kB  00:00
(16/31): perl-Pod-Escapes-1.04-299.el7_9.noarch.rpm          |  52 kB  00:00
(17/31): perl-Scalar-List-Utils-1.27-248.el7.x86_64.rpm  |  36 kB  00:00
(18/31): git-1.8.3.1-23.el7_8.x86_64.rpm          | 4.4 MB  00:00
(19/31): perl-Socket-2.010-5.el7.x86_64.rpm          |  49 kB  00:00
(20/31): perl-Storable-2.45-3.el7.x86_64.rpm          |  77 kB  00:00
(21/31): perl-TermReadKey-2.30-20.el7.x86_64.rpm          |  31 kB  00:00
(22/31): perl-Text-ParseWords-3.29-4.el7.noarch.rpm          |  14 kB  00:00
(23/31): perl-Time-HiRes-1.9725-3.el7.x86_64.rpm          |  45 kB  00:00
(24/31): perl-constant-1.27-2.el7.noarch.rpm          |  19 kB  00:00
(25/31): perl-parent-0.225-244.el7.noarch.rpm          |  12 kB  00:00
(26/31): perl-podlators-2.5.1-3.el7.noarch.rpm          | 112 kB  00:00
(27/31): perl-threads-1.87-4.el7.x86_64.rpm          |  49 kB  00:00
(28/31): perl-Time-Local-1.2300-2.el7.noarch.rpm          |  24 kB  00:00
(29/31): perl-threads-shared-1.43-6.el7.x86_64.rpm          |  39 kB  00:00
(30/31): perl-macros-5.16.3-299.el7_9.x86_64.rpm          |  44 kB  00:00
(31/31): perl-libs-5.16.3-299.el7_9.x86_64.rpm          | 690 kB  00:00
--------------------------------------------------------------------------
Total                          14 MB/s |  16 MB  00:01
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : 1:perl-parent-0.225-244.el7.noarch                      1/31
  Installing : perl-HTTP-Tiny-0.033-3.el7.noarch                       2/31
  Installing : perl-podlators-2.5.1-3.el7.noarch                       3/31
  Installing : perl-Pod-Perldoc-3.20-4.el7.noarch                      4/31
  Installing : 1:perl-Pod-Escapes-1.04-299.el7_9.noarch                5/31
  Installing : perl-Encode-2.51-7.el7.x86_64                           6/31
  Installing : perl-Text-ParseWords-3.29-4.el7.noarch                  7/31
  Installing : perl-Pod-Usage-1.63-3.el7.noarch                        8/31
  Installing : 4:perl-macros-5.16.3-299.el7_9.x86_64                   9/31
  Installing : perl-Storable-2.45-3.el7.x86_64                        10/31
  Installing : perl-Exporter-5.68-3.el7.noarch                        11/31
  Installing : perl-constant-1.27-2.el7.noarch                        12/31
  Installing : perl-Socket-2.010-5.el7.x86_64                         13/31
  Installing : perl-Time-Local-1.2300-2.el7.noarch                    14/31
  Installing : perl-Carp-1.26-244.el7.noarch                          15/31
  Installing : 4:perl-Time-HiRes-1.9725-3.el7.x86_64                  16/31
  Installing : perl-PathTools-3.40-5.el7.x86_64                       17/31
  Installing : perl-Scalar-List-Utils-1.27-248.el7.x86_64             18/31
  Installing : 1:perl-Pod-Simple-3.28-4.el7.noarch                    19/31
  Installing : perl-File-Temp-0.23.01-3.el7.noarch                    20/31
  Installing : perl-File-Path-2.09-2.el7.noarch                       21/31
  Installing : perl-threads-shared-1.43-6.el7.x86_64                  22/31
```

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  Installing : perl-threads-1.87-4.el7.x86_64                   23/31
  Installing : perl-Filter-1.49-3.el7.x86_64                    24/31
  Installing : 4:perl-libs-5.16.3-299.el7_9.x86_64              25/31
  Installing : perl-Getopt-Long-2.40-3.el7.noarch               26/31
  Installing : 4:perl-5.16.3-299.el7_9.x86_64                   27/31
  Installing : 1:perl-Error-0.17020-2.el7.noarch               28/31
  Installing : perl-TermReadKey-2.30-20.el7.x86_64              29/31
  Installing : perl-Git-1.8.3.1-23.el7_8.noarch                30/31
  Installing : git-1.8.3.1-23.el7_8.x86_64                     31/31
  Verifying  : perl-HTTP-Tiny-0.033-3.el7.noarch                1/31
  Verifying  : perl-threads-shared-1.43-6.el7.x86_64            2/31
  Verifying  : perl-Storable-2.45-3.el7.x86_64                 3/31
  Verifying  : perl-Exporter-5.68-3.el7.noarch                 4/31
  Verifying  : perl-constant-1.27-2.el7.noarch                 5/31
  Verifying  : perl-PathTools-3.40-5.el7.x86_64                6/31
  Verifying  : 4:perl-macros-5.16.3-299.el7_9.x86_64            7/31
  Verifying  : git-1.8.3.1-23.el7_8.x86_64                     8/31
  Verifying  : 1:perl-parent-0.225-244.el7.noarch              9/31
  Verifying  : perl-Socket-2.010-5.el7.x86_64                  10/31
  Verifying  : perl-TermReadKey-2.30-20.el7.x86_64             11/31
  Verifying  : perl-File-Temp-0.23.01-3.el7.noarch             12/31
  Verifying  : 1:perl-Pod-Simple-3.28-4.el7.noarch             13/31
  Verifying  : perl-Time-Local-1.2300-2.el7.noarch             14/31
  Verifying  : 1:perl-Pod-Escapes-1.04-299.el7_9.noarch        15/31
  Verifying  : perl-Git-1.8.3.1-23.el7_8.noarch                16/31
  Verifying  : perl-Carp-1.26-244.el7.noarch                   17/31
  Verifying  : 1:perl-Error-0.17020-2.el7.noarch               18/31
  Verifying  : 4:perl-Time-HiRes-1.9725-3.el7.x86_64           19/31
  Verifying  : perl-Scalar-List-Utils-1.27-248.el7.x86_64      20/31
  Verifying  : perl-Pod-Usage-1.63-3.el7.noarch                21/31
  Verifying  : perl-Encode-2.51-7.el7.x86_64                   22/31
  Verifying  : perl-Pod-Perldoc-3.20-4.el7.noarch              23/31
  Verifying  : perl-podlators-2.5.1-3.el7.noarch               24/31
  Verifying  : 4:perl-5.16.3-299.el7_9.x86_64                  25/31
  Verifying  : perl-File-Path-2.09-2.el7.noarch                26/31
  Verifying  : perl-threads-1.87-4.el7.x86_64                  27/31
  Verifying  : perl-Filter-1.49-3.el7.x86_64                   28/31
  Verifying  : perl-Getopt-Long-2.40-3.el7.noarch              29/31
  Verifying  : perl-Text-ParseWords-3.29-4.el7.noarch          30/31
  Verifying  : 4:perl-libs-5.16.3-299.el7_9.x86_64             31/31

Installed:
  git.x86_64 0:1.8.3.1-23.el7_8

Dependency Installed:
  perl.x86_64 4:5.16.3-299.el7_9
  perl-Carp.noarch 0:1.26-244.el7
  perl-Encode.x86_64 0:2.51-7.el7
  perl-Error.noarch 1:0.17020-2.el7
  perl-Exporter.noarch 0:5.68-3.el7
  perl-File-Path.noarch 0:2.09-2.el7
  perl-File-Temp.noarch 0:0.23.01-3.el7
  perl-Filter.x86_64 0:1.49-3.el7
  perl-Getopt-Long.noarch 0:2.40-3.el7
```

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  perl-Git.noarch 0:1.8.3.1-23.el7_8
  perl-HTTP-Tiny.noarch 0:0.033-3.el7
  perl-PathTools.x86_64 0:3.40-5.el7
  perl-Pod-Escapes.noarch 1:1.04-299.el7_9
  perl-Pod-Perldoc.noarch 0:3.20-4.el7
  perl-Pod-Simple.noarch 1:3.28-4.el7
  perl-Pod-Usage.noarch 0:1.63-3.el7
  perl-Scalar-List-Utils.x86_64 0:1.27-248.el7
  perl-Socket.x86_64 0:2.010-5.el7
  perl-Storable.x86_64 0:2.45-3.el7
  perl-TermReadKey.x86_64 0:2.30-20.el7
  perl-Text-ParseWords.noarch 0:3.29-4.el7
  perl-Time-HiRes.x86_64 4:1.9725-3.el7
  perl-Time-Local.noarch 0:1.2300-2.el7
  perl-constant.noarch 0:1.27-2.el7
  perl-libs.x86_64 4:5.16.3-299.el7_9
  perl-macros.x86_64 4:5.16.3-299.el7_9
  perl-parent.noarch 1:0.225-244.el7
  perl-podlators.noarch 0:2.5.1-3.el7
  perl-threads.x86_64 0:1.87-4.el7
  perl-threads-shared.x86_64 0:1.43-6.el7

Complete!
[root@ip-172-31-35-197 ~]# cd /usr/local/
[root@ip-172-31-35-197 local]# git clone https://github.com/letsencrypt/letsencr
ypt
Cloning into 'letsencrypt'...
remote: Enumerating objects: 89497, done.
remote: Counting objects: 100% (278/278), done.
remote: Compressing objects: 100% (190/190), done.
remote: Total 89497 (delta 106), reused 209 (delta 87), pack-reused 89219
Receiving objects: 100% (89497/89497), 44.87 MiB | 11.99 MiB/s, done.
Resolving deltas: 100% (65656/65656), done.
[root@ip-172-31-35-197 local]# cd /usr/local/letsencrypt
[root@ip-172-31-35-197 letsencrypt]# ./letsencrypt-auto --apache -d your_domain.
tld
Skipping bootstrap because certbot-auto is deprecated on this system.
Your system is not supported by certbot-auto anymore.
Certbot cannot be installed.
Please visit https://certbot.eff.org/ to check for other alternatives.
[root@ip-172-31-35-197 letsencrypt]# history
    1  yum install httpd -y
    2  yum -y install mod_ssl
    3  systemctl start httpd.service
    4  yum install epel-release
    5  yum install git
    6  cd /usr/local/
    7  git clone https://github.com/letsencrypt/letsencrypt
    8  cd /usr/local/letsencrypt
    9  ./letsencrypt-auto --apache -d your_domain.tld
    10  history
[root@ip-172-31-35-197 letsencrypt]#
```