

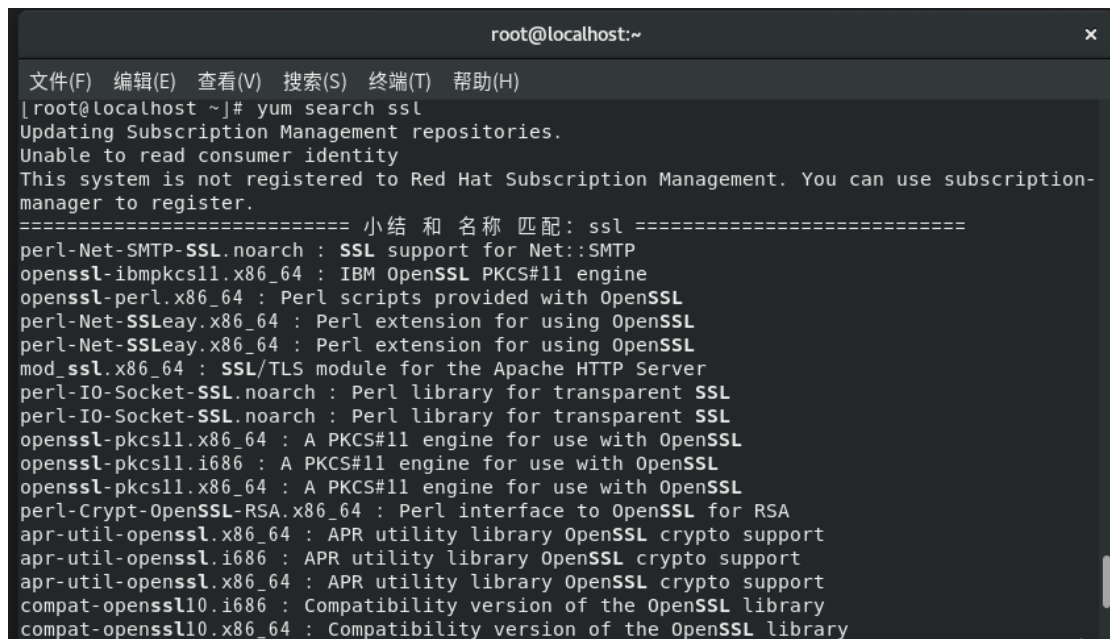
## 项目 2-拓展资料

创建基于 TLS 加密的虚拟主机（用 https 访问网站）

操作步骤：

1 查找有关 TLS 的 ssl 软件并安装

```
[root@www ~]# yum search ssl
```

A terminal window titled 'root@localhost:~' showing the output of the command 'yum search ssl'. The output lists various SSL-related packages and their descriptions. The package 'mod\_ssl.x86\_64' is highlighted as the relevant one for the task.

```
root@localhost:~
文件(F) 编辑(E) 查看(V) 搜索(S) 终端(T) 帮助(H)
[root@localhost ~]# yum search ssl
Updating Subscription Management repositories.
Unable to read consumer identity
This system is not registered to Red Hat Subscription Management. You can use subscription-
manager to register.
===== 小结 和 名称 匹配: ssl =====
perl-Net-SMTP-SSL.noarch : SSL support for Net::SMTP
openssl-ibmpkcs11.x86_64 : IBM OpenSSL PKCS#11 engine
openssl-perl.x86_64 : Perl scripts provided with OpenSSL
perl-Net-SSLeay.x86_64 : Perl extension for using OpenSSL
perl-Net-SSLeay.x86_64 : Perl extension for using OpenSSL
mod_ssl.x86_64 : SSL/TLS module for the Apache HTTP Server
perl-IO-Socket-SSL.noarch : Perl library for transparent SSL
perl-IO-Socket-SSL.noarch : Perl library for transparent SSL
openssl-pkcs11.x86_64 : A PKCS#11 engine for use with OpenSSL
openssl-pkcs11.i686 : A PKCS#11 engine for use with OpenSSL
openssl-pkcs11.x86_64 : A PKCS#11 engine for use with OpenSSL
perl-Crypt-OpenSSL-RSA.x86_64 : Perl interface to OpenSSL for RSA
apr-util-openssl.x86_64 : APR utility library OpenSSL crypto support
apr-util-openssl.i686 : APR utility library OpenSSL crypto support
apr-util-openssl.x86_64 : APR utility library OpenSSL crypto support
compat-openssl10.i686 : Compatibility version of the OpenSSL library
compat-openssl10.x86_64 : Compatibility version of the OpenSSL library
```

mod\_ssl.x86\_64 : SSL/TLS module for the Apache HTTP Server

<需要安装这个安装包>

```
[root@www ~]# yum -y install mod_ssl.x86_64
```

```
root@localhost:~
文件(F) 编辑(E) 查看(V) 搜索(S) 终端(T) 帮助(H)

事务概要
=====
安装 1 软件包

总计: 129 k
安装大小: 268 k
下载软件包:
运行事务检查
事务检查成功。
运行事务测试
事务测试成功。
运行事务
准备中      :
Installing  : mod_ssl-1:2.4.37-10.module+el8+2764+7127e69e.x86_64
运行脚本    : mod_ssl-1:2.4.37-10.module+el8+2764+7127e69e.x86_64
验证        : mod_ssl-1:2.4.37-10.module+el8+2764+7127e69e.x86_64
Installed products updated.

已安装:
  mod_ssl-1:2.4.37-10.module+el8+2764+7127e69e.x86_64

完毕!
[root@localhost ~]#
```

```
[root@www ~]# cd /etc/httpd/
```

```
[root@www httpd]# ls
```

```
conf  conf.d  conf.modules.d  logs  modules  run  state
```

```
[root@www httpd]# cd conf.d/
```

```
[root@www conf.d]# ls
```

```
autoindex.conf  httpd-vhosts.conf  README  ssl.conf
```

```
userdir.conf  welcome.conf
```

```
[root@localhost ~]# cd /etc/httpd/
[root@localhost httpd]# ls
conf  conf.d  conf.modules.d  logs  modules  run  state
[root@localhost httpd]# cd conf.d/
[root@localhost conf.d]# ls
autoindex.conf  httpd-vhosts.conf  README  ssl.conf  userdir.conf  welcome.conf
[root@localhost conf.d]# vim ssl.conf
```

## 2.编写 ssl 的配置文件

```
[root@www conf.d]# vim ssl.conf
```

<VirtualHost \*:443>

# General setup for the virtual host, inherited from global configuration

DocumentRoot "/home/www" <网页根目录>

ServerName www.example1.com <主机名>

```
root@localhost:/etc/httpd/conf.d
文件(F) 编辑(E) 查看(V) 搜索(S) 终端(T) 帮助(H)
#
SSLCryptoDevice builtin
#SSLCryptoDevice ubsec
##
## SSL Virtual Host Context
##
<VirtualHost *:443>
# General setup for the virtual host, inherited from global configuration
DocumentRoot "/home/www"
ServerName www.example1.com:443
# Use separate log files for the SSL virtual host; note that LogLevel
# is not inherited from httpd.conf.
ErrorLog logs/ssl_error_log
TransferLog logs/ssl_access_log
LogLevel warn
# SSL Engine Switch:
# Enable/Disable SSL for this virtual host.
SSLEngine on
-- 插入 --
```

### 3.启动 httpd 服务

```
[root@localhost ~]# systemctl restart httpd
```

### 4.验证

```
[root@localhost ~]# firefox & <后台运行火狐浏览器>
```

输入: http://www.example1.com

点击高级(Advanced),选择添加安全例外(Add Exception...),

## 点击确保安全例外（Confirm Security Exception）

