# Apache-HTTPS安装配置

## 1.准备环境

yum install gcc gcc-c++ cmake

yum remove apr-util-devel apr apr-util-mysql apr-docs apr-devel apr-util apr-util-docs

## 2.安装apr

tar -zxvf apr-1.5.1.tar.gz

./configure --prefix=/usr/local/apr/

make && make install

## 3.安装apr\_util

tar -zxvf apr-util-1.5.4.tar.gz

./configure --prefix=/usr/local/apr-util/ --with-apr=/usr/local/apr/

make && make install

## 4.安装pcre

tar -zxvf pcre-8.39.tar.gz

./configure --prefix=/usr/local/pcre/

make && make install

## 5.安装openssl

tar –zvxf openssl-1.0.0e.tar.gz

./config --prefix=/usr/local/openssl/

修改Makefile里的CFLAG 增加-fPIC，如：CFLAG= -fPIC -DOPENSSL

make && make install

## 6.安装apache

tar -zxvf httpd-2.4.28.tar.gz

./configure --prefix=/usr/local/apache --with-apr=/usr/local/apr --with-apr-util=/usr/local/apr-util --with-pcre=/usr/local/pcre --enable-so --enable-rewrite --enable-ssl --with-ssl=/usr/local/openssl

make && make install

## 7.修改httpd.conf

（1）加载so

LoadModule ssl\_module modules/mod\_ssl.so

LoadModule socache\_shmcb\_module modules/mod\_socache\_shmcb.so

（2）

ServerName dzp.eyun.cn:80

DocumentRoot "/var/www/html"

<Directory "/var/www/html">

（3）启用ssl的配置

Include conf/extra/httpd-ssl.conf

## 8.修改httpd-ssl.conf

Listen 443 https

<VirtualHost \_default\_:443>

DocumentRoot "/var/www/html"

ServerName dzp.eyun.cn:443

SSLCertificateFile "/usr/local/apache/conf/server.crt"

SSLCertificateKeyFile "/usr/local/apache/conf/server.key"

## 9.生成证书

（1）生成服务器用的私钥文件server.key

openssl genrsa -out server.key 1024

（2）生成未签署的server.csr

openssl req -new -key server.key -out server.csr

程序提示输入一系列参数，包括国别、省名、市名。。。，按照提示输入即可

（3）签署服务器证书文件server.crt

openssl req -x509 -days 365 -key server.key -in server.csr -out server.crt

（4）然后将生成的server.key、server.csr、server.crt拷贝到/usr/local/apache/conf/目录下

（5）重启/usr/local/apache/bin/apachectl restart

## 10.其他

（1）查看证书内容:

openssl x509 -in /usr/local/apache/conf/server.crt -noout -subject

（2）察看动态库依赖的文件:

ldd /usr/local/apache/modules/mod\_ssl.so

有时候可能会遇见这个错误：

httpd: Syntax error on line 80 of /etc/httpd/httpd.conf: Cannot load /usr/local/apache/modules/mod\_ssl.so into server: libssl.so.0.9.8: cannot open shared object file: No such file or directory

（3）curl –v 查看请求

举个栗子：curl –v [www.baidu.com](http://www.baidu.com)

[root@dzp tmp]# curl -v https://www.baidu.com

\* About to connect() to www.baidu.com port 443 (#0)

\* Trying 61.135.169.121...

\* Connected to www.baidu.com (61.135.169.121) port 443 (#0)

\* Initializing NSS with certpath: sql:/etc/pki/nssdb

\* CAfile: /etc/pki/tls/certs/ca-bundle.crt

CApath: none

\* SSL connection using TLS\_ECDHE\_RSA\_WITH\_AES\_128\_GCM\_SHA256

\* Server certificate:

\* subject: CN=baidu.com,OU=service operation department.,O="BeiJing Baidu Netcom Science Technology Co., Ltd",L=beijing,ST=beijing,C=CN

\* start date: Jun 29 00:00:00 2017 GMT

\* expire date: Aug 17 23:59:59 2018 GMT

\* common name: baidu.com

\* issuer: CN=Symantec Class 3 Secure Server CA - G4,OU=Symantec Trust Network,O=Symantec Corporation,C=US

> GET / HTTP/1.1

> User-Agent: curl/7.29.0

> Host: www.baidu.com

> Accept: \*/\*

>

< HTTP/1.1 200 OK

< Accept-Ranges: bytes

< Cache-Control: private, no-cache, no-store, proxy-revalidate, no-transform

< Connection: Keep-Alive

< Content-Length: 2443

< Content-Type: text/html

< Date: Wed, 11 Oct 2017 07:42:39 GMT

< Etag: "588603e7-98b"

< Last-Modified: Mon, 23 Jan 2017 13:23:51 GMT

< Pragma: no-cache

< Server: bfe/1.0.8.18

< Set-Cookie: BDORZ=27315; max-age=86400; domain=.baidu.com; path=/

<

<!DOCTYPE html>

<!--STATUS OK--><html> <head