编译安装httpd-2.4.25

环境介绍：

系统环境：CentOS release 6.7 (Final)

所需软件包：httpd-2.4.25.tar.gz，apr-1.5.2.tar.gz，apr-util-1.5.4.tar.gz

开发环境包组：Development Tools, Server Platform Development

0、安装开发环境包组

# yum group install “Development Tools” “Server Platform Development”

1、解决依赖关系

httpd-2.4.25需要较新版本的apr和apr-util，因此需要对此进行升级

（1）下载arp、apr-util源码安装包

# cd /usr/src

# wget https://mirrors.aliyun.com/apache/apr/apr-1.5.2.tar.gz

# wget https://mirrors.aliyun.com/apache/apr/apr-util-1.5.4.tar.gz

（2）编译安装apr

src]# tar xf apr-1.5.2.tar.gz

src]# cd apr-1.5.2

apr-1.5.2]# ./configure --prefix=/usr/local/apr-httpd/

apr-1.5.2]# make

apr-1.5.2]# make install

（3）编译安装apr-util

src]# tar xf apr-util-1.5.4.tar.gz

src]# cd apr-util-1.5.4

apr-util-1.5.4]# ./configure --prefix=/usr/local/apr-util-httpd --with-apr=/usr/local/apr-httpd/

apr-util-1.5.4]# make

apr-util-1.5.4]# make install

（4）httpd-2.4.25编译过程也要依赖pcre-devel软件包，需要事先安装

# yum install pcre-devel -y

2、编译安装httpd-2.4.25

（1）下载httpd-2.4.25源码安装包

# cd /usr/src/

# wget <https://mirrors.aliyun.com/apache/httpd/httpd-2.4.25.tar.gz>

src]# tar xf httpd-2.4.25.tar.gz

src]# cd httpd-2.4.25

httpd-2.4.25]# ./configure --prefix=/usr/local/apache --sysconfdir=/etc/httpd --enable-so --enable-ssl --enable-cgi --enable-rewrite --with-zlib --with-pcre --with-apr=/usr/local/apr-httpd/ --with-apr-util=/usr/local/apr-util-httpd/ --enable-modules=most --enable-mpms-shared=all --with-mpm=prefork

httpd-2.4.25]# make

httpd-2.4.25]# make install

--sysconfdir：配置安装路径；

--enable-so：支持DSO机制，支持模块动态装卸载；

--enable-ssl：启用ssl功能，编译进程序；

--enable-cgi：支持cgi模式；

--enable-rewrite：支持url重写，依赖pcre-devel包，需事先安装；

# yum install pcre-devel

--with-zlib：实现网络传输压缩库；

--with-pcre：支持pcre；

--with-apr：apr安装的路径；

--with-apr-util：apr-util安装的路径;

--enable-modules：启用的模块，most：编译大部分模块；

--enable-mpms-shared：mpms做成共享模式功能；

--with-mpm：mpm默认机制；

补充：

（1）构建MPM为静态模块

在全部平台中，MPM都可以构建为静态模块。在构建时选择一种MPM，链接到服务器中。如果要改变MPM，必须重新构建。为了使用指定的MPM，请在执行configure脚本 时，使用参数 --with-mpm=NAME。NAME是指定的MPM名称。编译完成后，可以使用 ./httpd -l 来确定选择的MPM。 此命令会列出编译到服务器程序中的所有模块，包括 MPM。

（2）构建 MPM 为动态模块

在Unix或类似平台中，MPM可以构建为动态模块，与其它动态模块一样在运行时加载。 构建 MPM 为动态模块允许通过修改LoadModule指令内容来改变MPM，而不用重新构建服务器程序。在执行configure脚本时，使用--enable-mpms-shared选项即可启用此特性。当给出的参数为all时，所有此平台支持的MPM模块都会被安装。还可以在参数中给出模块列表。默认MPM，可以自动选择或者在执行configure脚本时通过--with-mpm选项来指定，然后出现在生成的服务器配置文件中。编辑LoadModule指令内容可以选择不同的MPM。

3、创建连接头文件

~]# ln -sv /usr/local/apache/include/ /usr/include/httpd

"/usr/include/httpd" -> “/usr/local/apache/include/"

4、设置MANPATH

在/etc/man.config文件中新增MANPATH指令，并指向新的命令手册路径;

~]# vim /etc/man.config

48 MANPATH /usr/local/apache/man

5、修改httpd的主配置文件，设置其Pid文件的路径

编辑/etc/httpd/httpd.conf，添加如下行即可：

PidFile “/usr/local/apache/logs/httpd.pid”

6、提供SysV服务脚本/etc/rc.d/init.d/httpd，内容如下：

#!/bin/bash

#

# httpd Startup script for the Apache HTTP Server

#

# chkconfig: - 85 15

# description: The Apache HTTP Server is an efficient and extensible \

# server implementing the current HTTP standards.

# processname: httpd

# config: /etc/httpd/conf/httpd.conf

# config: /etc/sysconfig/httpd

# pidfile: /var/run/httpd/httpd.pid

#

### BEGIN INIT INFO

# Provides: httpd

# Required-Start: $local\_fs $remote\_fs $network $named

# Required-Stop: $local\_fs $remote\_fs $network

# Should-Start: distcache

# Short-Description: start and stop Apache HTTP Server

# Description: The Apache HTTP Server is an extensible server

# implementing the current HTTP standards.

### END INIT INFO

# Source function library.

. /etc/rc.d/init.d/functions

if [ -f /etc/sysconfig/httpd ]; then

. /etc/sysconfig/httpd

fi

# Start httpd in the C locale by default.

HTTPD\_LANG=${HTTPD\_LANG-"C"}

# This will prevent initlog from swallowing up a pass-phrase prompt if

# mod\_ssl needs a pass-phrase from the user.

INITLOG\_ARGS=""

# Set HTTPD=/usr/sbin/httpd.worker in /etc/sysconfig/httpd to use a server

# with the thread-based "worker" MPM; BE WARNED that some modules may not

# work correctly with a thread-based MPM; notably PHP will refuse to start.

# Path to the apachectl script, server binary, and short-form for messages.

apachectl=/usr/local/apache/bin/apachectl <—重要，此路径为编译的http服务启动二进制命令路径

httpd=${HTTPD-/usr/local/apache/bin/httpd} <—重要，编译的httpd二进制命令路径

prog=httpd

pidfile=${PIDFILE-/usr/local/apache/logs/httpd.pid} <—重要，httpd pid文件路径，记录httpd守护进程的进程号

lockfile=${LOCKFILE-/var/lock/subsys/httpd}

RETVAL=0

STOP\_TIMEOUT=${STOP\_TIMEOUT-10}

# The semantics of these two functions differ from the way apachectl does

# things -- attempting to start while running is a failure, and shutdown

# when not running is also a failure. So we just do it the way init scripts

# are expected to behave here.

start() {

echo -n $"Starting $prog: "

LANG=$HTTPD\_LANG daemon --pidfile=${pidfile} $httpd $OPTIONS

RETVAL=$?

echo

[ $RETVAL = 0 ] && touch ${lockfile}

return $RETVAL

}

# When stopping httpd, a delay (of default 10 second) is required

# before SIGKILLing the httpd parent; this gives enough time for the

# httpd parent to SIGKILL any errant children.

stop() {

status -p ${pidfile} $httpd > /dev/null

if [[ $? = 0 ]]; then

echo -n $"Stopping $prog: "

killproc -p ${pidfile} -d ${STOP\_TIMEOUT} $httpd

else

echo -n $"Stopping $prog: "

success

fi

RETVAL=$?

echo

[ $RETVAL = 0 ] && rm -f ${lockfile} ${pidfile}

}

reload() {

echo -n $"Reloading $prog: "

if ! LANG=$HTTPD\_LANG $httpd $OPTIONS -t >&/dev/null; then

RETVAL=6

echo $"not reloading due to configuration syntax error"

else

# Force LSB behaviour from killproc

LSB=1 killproc -p ${pidfile} $httpd -HUP

RETVAL=$?

if [ $RETVAL -eq 7 ]; then

failure $"httpd shutdown"

fi

fi

echo

}

# See how we were called.

case "$1" in

start)

start

;;

stop)

stop

;;

status)

status -p ${pidfile} $httpd

RETVAL=$?

;;

restart)

stop

start

;;

condrestart|try-restart)

if status -p ${pidfile} $httpd >&/dev/null; then

stop

start

fi

;;

force-reload|reload)

reload

;;

graceful|help|configtest|fullstatus)

$apachectl $@

RETVAL=$?

;;

\*)

echo $"Usage: $prog {start|stop|restart|condrestart|try-restart|force-reload|reload|status|fullstatus|graceful|help|configtest}"

RETVAL=2

esac

exit $RETVAL

注：创建/etc/rc.d/init.d/httpd服务文件，将以上内容复制进去，使用chmod a+x 命令赋予其执行权限

6、启动httpd服务

~]# service httpd start

Starting httpd: AH00558: httpd: Could not reliably determine the server's fully qualified domain name, using web1.localhost.com. Set the 'ServerName' directive globally to suppress this message

[ OK ]

8、查看是否监听了80端口

~]# ss -tnl

State Recv-Q Send-Q Local Address:Port Peer Address:Port

LISTEN 0 128 :::80 :::\*

9、设置防火墙

~]# iptables -I INPUT -p tcp -m state --state NEW -m tcp --dport 80 -j ACCEPT

10、使用浏览器访问测试