

Axis2 Linux 下安装步骤说明

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软件说明

1. httpd-2.2.22.tar.gz
2. axis2c-src-1.6.0.tar.gz

安装 Apache

```
解压: tar zxvf httpd-2.2.22.tar.gz
cd httpd-2.2.22
配置: ./configure --prefix=/apache/httpd #把 HTTP 服务安装到/apache/httpd 目录下
编译: make
安装: make install
定制: 编辑/apache/httpd/conf/httpd.conf 中的 ServerRoot 值为"/apache/httpd"
去掉 ServerName 的注释, 并设置值为 localhost:80
启动: /apache/httpd/bin/apachectl start
检验: 使用浏览器打开网址 http://localhost 看是否出现 Apache 的欢迎页面。
```

修改位置如图所示:

```
t
25 # ServerRoot at a non-local disk, be sure to point the LockFile dir
    ective
26 # at a local disk.  If you wish to share the same ServerRoot for mu
    ltiple
27 # httpd daemons, you will need to change at least LockFile and PidF
    ile.
28 #
29 ServerRoot "/apache/httpd"
30
31 #
32 # Listen: Allows you to bind Apache to specific IP addresses and/or
```

```
103 # ServerName gives the name and port that the server uses to identi
    fy itself.
104 # This can often be determined automatically, but we recommend you
    specify
105 # it explicitly to prevent problems during startup.
106 #
107 # If your host doesn't have a registered DNS name, enter its IP add
    ress here.
108 #
109 ServerName 192.168.56.130:80 或者写localhost:80
110
```

安装 Axis2

1. 设置环境变量

vim /etc/profile

到最后一行增加以下内容

```
AXISCPP_HOME=/apache/axis2c-src-1.6.0
```

```
AXIS2C_HOME=/apache/axiscpp
AXISCPP_DEPLOY=/apache/axiscpp
LD_LIBRARY_PATH=/usr/lib:$AXISCPP_DEPLOY/lib:$LD_LIBRARY_PATH
export AXIS2C_HOME AXISCPP_HOME AXISCPP_DEPLOY LD_LIBRARY_PATH
```

注销用户重新登录

2. 安装

```
解压: tar zxvf axis2c-src-1.6.0.tar.gz --directory=/apache
将 axis c++源码解压到/apache/axis-c-src-1-3-linux 目录下。
cd $AXISCPP_HOME
配置: ./configure --prefix=$AXISCPP_DEPLOY --with-apache2=/apache/httpd/include
编译: make (需要几分钟时间)
安装: make install
检验: 检查/apache/axiscpp 目录下是否生成了 Axis C++的目录。
```

发布 axis.so

```
1. cp $AXIS2C_HOME/lib/libmod_axis2.so.0.6.0 /apache/httpd/modules/mod_axis2.so
```

vim /apache/httpd/conf/http.conf 增加以下内容

```
LoadModule axis2_module modules/mod_axis2.so
Axis2RepoPath /apache/axiscpp
Axis2LogFile /usr/tmp/AxisLog
Axis2MaxLogFileSize 200
Axis2LogLevel LOG_LEVEL
<Location /axis2>
    SetHandler axis2_module
```

</Location>

如图所示:

```
48 # Statically compiled modules (those listed by `httpd -l') do not n
    eed
49 # to be loaded here.
50 #
51 # Example:
52 # LoadModule foo_module modules/mod_foo.so
53 #
54
55 LoadModule axis2_module modules/mod_axis2.so
56 Axis2RepoPath /apache/axiscpp
57 Axis2LogFile /usr/tmp/AxisLog
58 Axis2MaxLogFileSize 200
59 Axis2LogLevel LOG_LEVEL
60 <Location /axis2>
61     SetHandler axis2_module
62 </Location>
63
```

编译 Axis2 Sample

```
cd /apache/axis2c-src-1.6.0/samples/
./configure --prefix=${AXIS2C_HOME} --with-axis2=${AXIS2C_HOME}/include/axis2-1.6.0
make
m cannot set language to "en_us"ake install
```

编译测试 Axis2 hello demo

//编译服务端

```
cd /apache/axiscpp/docs/docs/hello/service
gcc -shared -olibhello.so -I$AXIS2C_HOME/include/axis2-1.6.0/ -L$AXIS2C_HOME/lib -laxutil -laxis2_axiom -laxis2_parser -laxis2_engine -lpthread
-laxis2_http_sender -laxis2_http_receiver hello_svc.c
cp hello/services.html services.xml
mkdir /apache/axiscpp/services/hello
mv services.xml libhello.so /apache/axiscpp/services/hello
```

//编译客户端

```
cd /apache/axiscpp/docs/docs/hello/client
gcc -o hello -I$AXIS2C_HOME/include/axis2-1.6.0/ -L$AXIS2C_HOME/lib -laxutil -laxis2_axiom -laxis2_parser -laxis2_engine -lpthread -laxis2_http_sender
-laxis2_http_receiver hello.c -ldl -Wl,--rpath -Wl,$AXIS2C_HOME/lib
```

//测试

开启两个终端,一个运行服务端,一个运行客户端

服务端:

重启 httpd

```
/apache/httpd/bin/apachectl stop
```

```
/apache/httpd/bin/apachectl start
```

```
/apache/axiscpp/bin/axis2_http_server
```

客户端:

```
cd /apache/axiscpp/docs/docs/hello/client
```

```
./hello
```

可以看到在服务端返回的信息
在服务端可以看到客户端发送的信息

如图所示:
客户端:

```
You have new mail in /var/spool/mail/root
[root@localhost client]# /usr/sbin/setenforce 0
[root@localhost client]# ./hello
Using endpoint : http://localhost:9090/axis2/services/hello

Received greeting: "Hello Client!" from service
[root@localhost client]# █
```

服务端:

```
[root@localhost bin]# /apache/httpd/bin/apachectl stop
[root@localhost bin]# /apache/httpd/bin/apachectl start
[root@localhost bin]# ./axis2_http_server
Started Simple Axis2 HTTP Server ...
Client greeted saying "Hello Server!"
█
```

参考资料

http://axis.apache.org/axis2/c/core/docs/axis2c_manual.html

备注 错误说明

1. 运行客户端后没有提示内容,可以从 log 中看到错误信息

Vim /usr/tmp/AsixLog

```
124 [Wed Jun 20 19:06:31 2012] [error] class_loader.c(162) Loading shared library /apache/axiscpp/services/hello/libhello.so Failed. DLERROR IS /apache/axiscpp/services/hello/libhello.so: cannot restore segment prot after reloc: Permission denied
```

```
120 [Wed Jun 20 19:06:31 2012] [debug] phase_holder.c(139) Add handler AddressingOutHandler to phase MessageOut
121 [Wed Jun 20 19:06:31 2012] [debug] phase_holder.c(139) Add handler AddressingOutHandler to phase MessageOut
122 [Wed Jun 20 19:06:31 2012] [debug] class_loader.c(140) /apache/axiscpp/services/sg_math/libdy.so shared lib loaded successfully
123 [Wed Jun 20 19:06:31 2012] [debug] msg_recv.c(131) loading the services from msg_recv_load_and_init_svc
124 [Wed Jun 20 19:06:31 2012] [error] class_loader.c(162) Loading shared library /apache/axiscpp/services/hello/libhello.so Failed. DLERROR IS /apache/axiscpp/services/hello/libhello.so: cannot restore segment prot after reloc: Permission denied
125 [Wed Jun 20 19:06:31 2012] [debug] msg_recv.c(131) loading the services from msg_recv_load_and_init_svc
```

这是因为 SELINUX 的问题，需要关闭 SELINUX，执行：[/usr/sbin/setenforce 0](#)

在重启 apache 服务,在运行服务端程序.运行客户端程序就可以看到内容