实验环境

操作系统: Red Hat Enterprise Linux Server release 6.0 (Santiago) 64 bita

注意,Nagios只能安装在Linux或Unix平台,不支持Windows平台,当然,它可以监控Windows平台。

环境准备

Apache 和PHP 不是安装Nagios所必须的,其实也可以说是必须的,你总不能去分析Nagios日志吧,因为Nagios提供了Web监控界面,通过Web监控界面可以清晰的看到被监控主机、服务、资源的运行状态,因此,安装配置一个Web服务环境是很必要的。关于Apache和PHP的安装配置细节可以参考我的随笔: Linux系统安装Appach 2.4.6 和Redhat Server 5.7 安装配置PHP ,这里将不会对细节做过多介绍。

一:安装APACHE

首先检查一下是否安装gcc、gcc-c++包,因为我们下面通过源码编译安装Apache软件。

```
[root@bogon nagios]# rpm -q gcc gcc-c++
gcc-4.4.4-13.e16.x86_64
gcc-c++-4.4.4-13.e16.x86_64
[root@bogon nagios]#
```

1: APR And APR-Util包安装

```
[root@bogon nagios]# tar zxvf apr-1.4.8.tar.gz
```

[root@bogon nagios]# cd apr-1.4.8

[root@bogon apr-1.4.8]# mkdir /usr/local/apr

[root@bogon apr-1.4.8]# ./configure --prefix=/usr/local/apr

[root@bogon apr-1.4.8]# make & make install

验证APR包是否安装成功,如果你可以在安装目录看到bin、build-1等四个目录,那就说明你已经成功安装了APR包。

```
[root@bogon apr-1.4.8]# cd /usr/local/apr
[root@bogon apr]# ls
bin build-1 include lib
[root@bogon apr]#
```

[root@bogon nagios]# mkdir /usr/local/apr-util

[root@bogon nagios]# tar xzvf apr-util-1.5.2.tar.gz

[root@bogon apr-util-1.5.2]# cd apr-util-1.5.2

[root@bogon apr-util-1.5.2]# ./configure --prefix=/usr/local/apr-util --with-apr=/usr/local/apr/bin/apr-1-config

[root@bogon apr-util-1.5.2]# make && make install

验证 APR-Util 包是否安装成功,如果你可以在安装目录看到bin、include、lib三个目录,那就说明你已经成功安装了APR包。

```
[root@bogon apr-util-1.5.2]# cd /usr/local/apr-util/
[root@bogon apr-util]# ls
bin include lib
[root@bogon apr-util]#
```

2:PCRE包安装

[root@bogon nagios]# unzip pcre-8.33.zip

[root@bogon nagios]# cd pcre-8.33

[root@bogon pcre-8.33]# mkdir /usr/local/pcre

[root@bogon pcre-8.33]# ./configure --prefix=/usr/local/pcre --with-apr=/usr/local/apr/bin/apr-1-config

[root@bogon pcre-8.33]# make && make install

```
[root@bogon pcre-8.33]# cd /usr/local/pcre/

[root@bogon pcre]# ls -lrt

total 16

drwxr-xr-x. 2 root root 4096 Aug 17 09:04 bin

drwxr-xr-x. 4 root root 4096 Aug 17 09:04 share

drwxr-xr-x. 2 root root 4096 Aug 17 09:04 include

drwxr-xr-x. 3 root root 4096 Aug 17 09:04 lib
```

3:Apache HTTP Server安装

[root@bogon nagios]# tar xzvf httpd-2.4.6. tar. gz

[root@bogon nagios]# cd httpd-2.4.6

[root@bogon httpd-2.4.6]# mkdir /usr/local/apache

[root@bogon httpd-2.4.6]# ./configure --prefix=/usr/local/apache/ --with-pcre=/usr/local/pcre/ --with-apr=/usr/local/apr --with-apr-util=/usr/local/apr-util

[root@bogon httpd-2.4.6]#make && make install

配置httpd.conf,找到ServerName选项,在下面增加服务器IP地址,如下所示

[root@bogon conf]# cd /usr/local/apache/conf

[root@bogon conf]# 1s

extra httpd.conf magic mime.types original

[root@bogon conf]# vi httpd.conf

```
#
# ServerName gives the name and port that the server uses to identify itself.
# This can often be determined automatically, but we recommend you specify
# it explicitly to prevent problems during startup.
#
# If your host doesn't have a registered DNS name, enter its IP address here.
#
# ServerName www.example.com:80
| http://www.cnblogs.com/kerrycode/
ServerName 192.168.210.129
```

启动Apache服务,验证是否安装成功,如果在浏览器里面输入http://localhost/显示"it works!",那说明Apache已经安装成功

[root@bogon conf]# /usr/local/apache/bin/apachectl start

httpd (pid 11025) already running



二:安装PHP

[root@bogon nagios]# tar zxvf php-5.3.26.tar.gz

[root@bogon nagios]# cd php-5.3.26

[root@bogon nagios]# ./configure --prefix=/usr/local/php --with-apxs2=/usr/local/apache/bin/apxs

```
checking for strftime... (cached) yes
checking which regex library to use... php
checking whether to enable LIBXML support... yes
checking libxml2 install dir... no
checking for xml2-config path...
configure: error: xml2-config not found. Please check your libxml2 installation.
```

配置过程中报错,这个错误时因为缺少libxml2-devel包,需要先安装libxml2-devel包

[root@bogon php-5.3.26]# yum install libxml2-devel

[root@bogon nagios]# ./configure --prefix=/usr/local/php --with-apxs2=/usr/local/apache/bin/apxs

[root@bogon nagios]# make

[root@bogon nagios]# make test

[root@bogon nagios]# make install

[root@bogon conf]# cd /usr/local/apache/conf

在/usr/local/apache/conf目录下,配置httpd.conf文件,增加index.php

<IfModule dir module>

DirectoryIndex index.html

</IfModule>

接下来找到〈IfModule mime_module〉,在后面增加配置信息AddType application/x-httpd-php .php,其它配置等安装好Nagios相关包进行配置。

Nagios安装

Step1: 检查包是否安装,因为Nagios需要依赖这些包提供服务

[root@bogon nagios]# rpm -q gcc glibc glibc-common gd gd-devel xinetd openssl-devel

```
[root@bogon nagios]# rpm -q gcc glibc glibc-common gd gd-devel xinetd openssl-devel gcc-4.4.4-13.el6.x86_64 glibc-2.12-1.7.el6.x86_64 glibc-2.12-1.7.el6.i686 glibc-common-2.12-1.7.el6.x86_64 package gd is not installed package gd-devel is not installed package xinetd is not installed package openssl-devel is not installed [root@bogon nagios]# http://www.cnblogs.com/kerrycode/
```

[root@bogon nagios]#yum install -y gd gd-devel xinetd openssl-devel

因为我的镜像下无gd-devel,如果不安装该包,则后面会遇到一些问题,这个包一定要装上。

Step 2: 建立nagios账号

[root@bogon ~]# useradd nagios

```
[root@bogon ~]# mkdir /usr/local/nagios
[root@bogon ~]# chown -R nagios.nagios /usr/local/nagios/
[root@bogon ~]#
```

```
[root@bogon ~]# useradd nagios
[root@bogon ~]# mkdir /usr/local/nagios
[root@bogon ~]# chown -R nagios.nagios /usr/local/nagios/
[root@bogon ~]#
```

Step 3: 下载Nagios相关包

Nagios Core

Nagios Core顾名思义,它是Nagios系统的核心部分,包含核心监测引擎和一个基本的web界面。

下载地址http://www.nagios.org/download/core,目前最新的版本是4.0.0 beta1,一般我们下载稳定一点的Nagios Core 3.5.0 版本。

Nagios Plugins

Nagios Plugins 是Nagios 插件包,通过它来监视服务,应用程序,指标,等等。像NRPE、NSClient++等,你可以通过下面链接地址http://www.nagios.org/download/plugins/ 下载各种插件。

Nagios Frontends

Nagios Frontends 是Nagios的皮肤(前端?),你可以通过它得到一些比较个性化、绚丽的Web监控界面

Nagios Addons

Nagios Addons是Nagios 扩展项目,http://www.nagios.org/download/addons/

Step 4: 安装Nagios Core

解压安装文件

[root@bogon nagios]# tar zxvf nagios-3.5.0.tar.gz

[root@bogon nagios]# cd nagios

编译安装包

[root@bogon nagios]# ./configure --prefix=/usr/local/nagios/

```
*** Configuration summary for nagios 3.5.0 03-15-2013 ***:

General Options:

Nagios executable: nagios
Nagios user/group: nagios, nagios
Command user/group: nagios, nagios
Embedded Perl: no
Event Broker: yes
Install ${prefix}: /usr/local/nagios/
Lock file: ${prefix}/var/nagios.lock
Check result directory: ${prefix}/var/nagios.lock
Init directory: /etc/rt.d/init.d
Apache conf.d directory: /etc/httpd/conf.d
Mail program: /bin/mail
Host OS: linux-gnu

http://www.cnblogs.com/kerrycode/

Web Interface Options:

HTML URL: http://localhost/nagios/
CGI URL: http://localhost/nagios/cgi-bin/
Traceroute (used by WAP): /bin/traceroute

Review the options above for accuracy. If they look okay, type 'make all' to compile the main program and CGIs.

[root@bogon nagios]#
```

[root@bogon nagios]# make all

```
make install-webconf
      This installs the Apache config file for the Nagios
      web interface
  make install-exfoliation
      This installs the Exfoliation theme for the Nagios
      web interface
  make install-classicui
    - This installs the classic theme for the Nagios
      web interface
*** Support Notes ***********************
If you have questions about configuring or running Nagios,
please make sure that you:
    - Look at the sample config files
    - Read the documentation on the Nagios Library at:
          http://library.nagios.com
before you post a question to one of the mailing lists.
Also make sure to include pertinent information that could
help others help you. This might include:
    - What version of Nagios you are using
    - What version of the plugins you are using
    - Relevant snippets from your config files
    - Relevant error messages from the Nagios log file
For more information on obtaining support for Nagios, visit:
      http://support.nagios.com
*************************
Enjoy.
                                         http://www.cnblogs.com/kerrycode/
[root@bogon nagios]#
```

[root@bogon nagios]# make install

[root@bogon nagios]# make install-init

```
[root@bogon nagios]# make install-init
/usr/bin/install -c -m 755 -d -o root -g root /etc/rc.d/init.d
/usr/bin/install -c -m 755 -o root -g root daemon-init /etc/rc.d/init.d/nagios

*** Init script installed ***

http://www.cnblogs.com/kerrycode/
```

[root@bogon nagios]# make install-commandmode

```
[root@bogon nagios]# make install-commandmode
/usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios//var/rw
chmod g+s /usr/local/nagios//var/rw
http://www.cnblogs.com/kerrycode/
*** External command directory configured ***
```

[root@bogon nagios]# make install-config

```
bogon nagios]# make install-config
 usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios//etc
usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios//etc/objects
 usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/nagios.cfg /usr/local/nagios//etc/nagios.cfg
 usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/cgi.cfg /usr/local/nagios//etc/cgi.cfg
 usr/bin/install -c -b -m 660 -o nagios -g nagios sample-config/resource.cfg /usr/local/nagios//etc/resource.cfg
usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/template-object/templates.cfg /usr/local/nagios//etc/objects/templat
 usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/template-object/commands.cfg /usr/local/nagios//etc/objects/commands
cfg
 usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/template-object/contacts.cfg /usr/local/nagios//etc/objects/contacts
cfg
usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/template-object/timeperiods.cfg /usr/local/nagios//etc/objects/timep
eriods.cfg
usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/template-object/localhost.cfg /usr/local/nagios//etc/objects/localho
st.cfg
usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/template-object/windows.cfg /usr/local/nagios//etc/objects/windows.c
usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/template-object/printer.cfg /usr/local/nagios//etc/objects/printer.c
usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/template-object/switch.cfg /usr/local/nagios//etc/objects/switch.cfg
*** Config files installed ***
                                                                                              http://www.cnblogs.com/kerrycode/
Remember, these are *SAMPLE* config files. You'll need to read
the documentation for more information on how to actually define
services, hosts, etc. to fit your particular needs.
```

[root@bogon nagios]# make install-webconf

```
[root@bogon nagios]# make install-webconf
/usr/bin/install -c -m 644 sample-config/httpd.conf /etc/httpd/conf.d/nagios.conf
*** Nagios/Apache conf file installed ***
[root@bogon nagios]#
```

```
[root@bogon nagios]# chkconfig --add nagios
[root@bogon nagios]# chkconfig --level 35 nagios on
[root@bogon nagios]# chkconfig --list nagios
nagios 0:off 1:off 2:off 3:on 4:on 5:on 6:off
[root@bogon nagios]#
```

验证是否安装成功

```
[root@bogon nagios]# cd /usr/local/nagios/
[root@bogon nagios]# ls
bin etc libexec sbin share var
[root@bogon nagios]#
```

Step 5: 安装Nagios 插件

[root@bogon nagios]# tar zxvf nagios-plugins-1.4.16.tar.gz

[root@bogon nagios]# cd nagios-plugins-1.4.16

[root@bogon nagios-plugins-1.4.16]# ./configure --prefix=/usr/local/nagios

```
config.status: executing libtool commands
config.status: executing po-directories commands
config.status: creating po/POTFILES
                                            http://www.cnblogs.com/kerrycode/
config.status: creating po/Makefile
            --with-apt-get-command:
              --with-ping6-command: /bin/ping6 -n -U -w %d -c %d %s
               --with-ping-command: /bin/ping -n -U -w %d -c %d %s
                       --with-ipv6: yes
                      --with-mysql: no
                    --with-openssl: yes
                     --with-gnutls: no
               --enable-extra-opts: no
                       --with-perl: /usr/bin/perl
             --enable-perl-modules: no
                      -with-cgiurl: /nagios/cgi-bin
               --with-trusted-path: /bin:/sbin:/usr/bin:/usr/sbin
                   --enable-libtap: no
[root@bogon nagios-plugins-1.4.16]#
```

[root@bogon nagios]#make && make install

Step 6: Apache基本配置

[root@bogon nagios-plugins-1.4.16]# cd /usr/local/apache/conf/

[root@bogon conf]# vi httpd.conf

```
#<IfModule setenvif_module>
#BrowserMatch "MSIE 10.0;" bad_DNT
#</IfModule>
#<IfModule headers_module>
#RequestHeader unset DNT env=bad_DNT
#</IfModule>
#setting for nagios
ScriptAlias /nagios/cgi-bin "/usr/local/nagios/sbin"
<Directory "/usr/local/nagios/sbin">
     AuthType Basic
Options ExecCGI
     AllowOverride None
     Order allow, deny
     Allow from all
     AuthName "Nagios Access"
     AuthUserFile /usr/local/nagios/etc/htpasswd
     Require valid-user
</Directory>
Alias /nagios "/usr/local/nagios/share"
<Directory "/usr/local/nagios/share">
     AuthType Basic
     Options None
     AllowOverride None
     Order allow, deny
     Allow from all
     AuthName "nagios Access"
     AuthUserFile /usr/local/nagios/etc/htpasswd
     Require valid-user
(/Directory)
httpd.conf" 529L, 18929C written
[root@bogon conf]#
```

```
[root@bogon conf]# /usr/local/apache/bin/htpasswd -c /usr/local/nagios/etc/htpasswd kerry
New password:
Re-type new password:
Adding password for user kerry
[root@bogon conf]# ■
```

Step 7: 启动相关服务

7.1启动Apache服务

[root@bogon conf]# /usr/local/apache/bin/apachectl start

7.2启动Nagios服务

[root@bogon conf]# service nagios start

http://192.168.210.129/nagios/ 就可以进入了

vi /usr/local/nagios/etc/cgi.cfg #use_auth = 0 改为0即可

