```
监控节点端(slave):
安装:ganglia-gmond
1 安装Ganglia
yum加入 epel 源
>rpm -Uvh http://dl.fedoraproject.org/pub/epel/6/x86_64/epel-release-6-8.noarch.rpm
yum加入 remi 源
>rpm -Uvh http://rpms.famillecollet.com/enterprise/remi-release-6.rpm
下载
http://ganglia.info/
安装依赖包
>yum install gcc apr apr-devel libconfuse libconfuse-devel expat-devel pcre pcre-devel -y
如果需安装gmetad
>yum install rrdtool* rrdtool-devel* -y
如果需安装gweb
>yum install rsync -y
异常:
    zlib library not configured properly
解决:
   yum install -y zlib-devel
<编译安装ganglia-3.7.x步有问题>libconfuse not found
libconfuse的安装(自己使用google搜索下载地址):
wget http://savannah.nongnu.org/download/confuse/confuse-2.7.tar.gz
tar -zxvf confuse-2.7.tar.gz
cd confuse-2.7
./configure CFLAGS=-fPIC --disable-nls
make && make install
安装gmond
>tar -zxvf ganglia-3.6.0.tar.gz
>cd ganglia-3.6.0/
>./configure
>make && make install
>cp gmond/gmond.init /etc/init.d/gmond
>chkconfig --add gmond
vim /etc/init.d/gmond
修改如下(find / -name 'gmond'搜索之):
GMOND=/usr/local/sbin/gmond
>gmond -t > /usr/local/etc/gmond.conf
>mkdir -p /etc/ganglia
>In -s /usr/local/etc/gmond.conf /etc/ganglia/gmond.conf
监控端配置(需要监控的节点均要配置)
>vim /etc/ganglia/gmond.conf
将cluster选项中 name设置为gmetad中data_source指定的名称即可(hadoop)。
cluster {
 name = "bi"//集群名称,要与gmetad.conf名称一致
 owner = "unspecified"//集群用户名称
 latlong = "unspecified"
 url = "unspecified"
host {
 location = "unspecified"
udp_send_channel {
 mcast_join = 239.2.11.71
 port = 8649
 ttl = 1
udp_recv_channel {
 mcast_join = 239.2.11.71
 port = 8649
 bind = 239.2.11.71
 retry_bind = true
 # Size of the UDP buffer. If you are handling lots of metrics you really
 # should bump it up to e.g. 10MB or even higher.
 # buffer = 10485760
每台机器添加路由:/sbin/route add -host 239.2.11.71 dev eth0
>service gmond start
>chkconfig gmond on
安装gmetad
安装rrdtool
下载 wget http://oss.oetiker.ch/rrdtool/pub/rrdtool-1.4.8.tar.gz
cd rrdtool-1.4.8
./configure --prefix=/usr/rrdtool
make && make install
然后运行
/usr/rrdtool/bin/rrdtool
(记得更改ganglia web项目的conf.php里面的rrdtool路径)
错误:
Can't locate ExtUtils/MakeMaker.pm in @INC (@INC contains: /usr/local/lib64/perl5 /usr/local/share/perl5
/usr/lib64/perl5/vendor_perl /usr/share/perl5/vendor_perl /usr/lib64/perl5 /usr/share/perl5 .) at Makefile.PL line 1.
解决:
yum install perl-ExtUtils-CBuilder perl-ExtUtils-MakeMaker就可以了
错误:
http://blog.chinaunix.net/uid-25135004-id-3169297.html
解决:
yum install pango-devel*
yum install cairo-devel*
gmetad:
>./configure CFLAGS="-I/usr/rrdtool/include/" CPPFLAGS="-I/usr/rrdtool/include/" LDFLAGS="-L/usr/rrdtool/lib/" --
with-gmetad --enable-gexec --prefix=/data1/ganglia/
>make && make install
>cp gmetad/gmetad.init /etc/init.d/gmetad
>chkconfig --add gmetad
>vim /etc/init.d/gmetad (这个是service gmetad start脚本的实现)
修改如下(find / -name 'gmetad'搜索之):
GMETAD=/usr/local/sbin/gmetad
为维护方便,修改配置路径:
>mkdir -p /etc/ganglia
>In -s /usr/local/etc/gmetad.conf /etc/ganglia/gmetad.conf
服务器端
>vim /etc/ganglia/gmetad.conf
data_source "bi" slave8.gitv.rack2.bk slave9.gitv.rack2.bk slave10.gitv.rack2.bk slave11.gitv.rack2.bk
master2.gitv.rack2.bk master1.gitv.rack1.bk slave1.gitv.rack1.bk slave2.gitv.rack1.bk slave3.gitv.rack1.bk
slave4.gitv.rack1.bk slave5.gitv.rack1.bk slave6.gitv.rack1.bk
interactive_port 8653
只需要更改 data_source一行,"hadoop"代表集群的名字,master,slave1,slave2,就是要监控的机器列表。默认端口
8649。
启动服务
>service gmetad start
>chkconfig gmetad on
如果启动不起来
/usr/local/sbin/gmetad -c /etc/ganglia/gmetad.conf -d 1
打出的日志提示rrds的所属用户需要是nobody才能启动ganglia的gmetad
chown -R nobody:nobody /data1/ganglia/rrds/
在gmetad机器上运行 tcpdump -i eth0 udp port 8649, 或者telnet localhost 8649
15:26:19.482458 IP 10.10.121.122.11480 > 10.10.121.40.8649: UDP, length 60
15:26:20.457043 IP 10.10.121.123.64151 > 10.10.121.40.8649: UDP, length 64
15:26:23.098796 IP 10.10.121.121.18969 > 10.10.121.40.8649: UDP, length 60
15:26:23.105323 IP 10.10.121.121.18969 > 10.10.121.40.8649: UDP, length 60
15:26:23.105336 IP 10.10.121.121.18969 > 10.10.121.40.8649: UDP, length 60
15:26:23.105343 IP 10.10.121.121.18969 > 10.10.121.40.8649: UDP, length 60
15:26:23.105350 IP 10.10.121.121.18969 > 10.10.121.40.8649: UDP, length 56
15:26:23.105357 IP 10.10.121.121.18969 > 10.10.121.40.8649: UDP, length 68
15:26:23.105363 IP 10.10.121.121.18969 > 10.10.121.40.8649: UDP, length 64
15:26:23.105367 IP 10.10.121.121.18969 > 10.10.121.40.8649: UDP,
15:26:23.105371 IP 10.10.121.121.18969 > 10.10.121.40.8649: UDP,
15:26:23.114689 IP 10.10.121.121.18969 > 10.10.121.40.8649: UDP, length 60
15:26:23.114701 IP 10.10.121.121.18969 > 10.10.121.40.8649: UDP, length 60
15:26:23.114705 IP 10.10.121.121.18969 > 10.10.121.40.8649: UDP, length 60
15:26:23.114711 IP 10.10.121.121.18969 > 10.10.121.40.8649: UDP, length 60
15:26:28.122322 IP 10.10.121.139.28544 > 10.10.121.40.8649: UDP, length 64
15:26:28.826247 IP 10.10.121.139.28544 > 10.10.121.40.8649: UDP, length 64
15:26:28.826263 IP 10.10.121.139.28544 > 10.10.121.40.8649: UDP, length 64
15:26:28.826269 IP 10.10.121.139.28544 > 10.10.121.40.8649: UDP, length 64
15:26:28.826273 IP 10.10.121.139.28544 > 10.10.121.40.8649: UDP,
15:26:29.533753 IP 10.10.121.122.11480 > 10.10.121.40.8649: UDP, length 64
15:26:33.158888 IP 10.10.121.121.18969 > 10.10.121.40.8649: UDP, length 60
15:26:35.002241 IP 10.10.121.120.39087 > 10.10.121.40.8649: UDP, length 60
15:26:36.489536 IP 10.10.121.139.28544 > 10.10.121.40.8649: UDP, length 64
15:26:36.489553 IP 10.10.121.139.28544 > 10.10.121.40.8649: UDP, length 64
15:26:36.489557 IP 10.10.121.139.28544 > 10.10.121.40.8649: UDP, length 64
15:26:36.489562 IP 10.10.121.139.28544 > 10.10.121.40.8649: UDP, length 60
安装Ganglia Web
>tar -zxvf ganglia-web-3.5.12.tar.gz
>cd ganglia-web-3.5.12/
>vim Makefile
     GDESTDIR = /work/installed/apache/htdocs/ganglia <ganglia-web 安装目录链接到httpd 主站点目录(apache服务器访问的根目录)>
     APACHE USER = daemon
>make && make install
cd /work/installed/apache/htdocs/ganglia/
cp conf_default.php conf.php
vim conf.php:
$conf['ganglia_port'] = 8653;
gmetad_root=/data1/ganglia
其他看着弄, rrdtool路径/usr/rrdtool/bin/rrdtool, /data1/ganglia/rrds路径等
访问Ganglia Web
服务端本机访问: http://127.0.0.1:10086/ganglia
                   (截图客户端访问)
呈现如下界面:
                                                                                              ∮ ▼ | <mark>※</mark> ▼百度
     ♂ ♦ ७ ७ ★ | ★ | http://192.168.252.130/ganglia/
                                                                                                                Automatic Rotation
                                                                  Live Dashboard
                                                                               Mobile
 Main
       Search
              Views
                    Aggregate Graphs
                                 Compare Hosts
                                             Events
  unspecified Cluster Report at Wed, 18 Jun 2014 08:58:15 +0000
                                                                                                                             Get Fresh Data
                                                             to to
  Last
                   day week
                            month year job or from
                                                                                                                              Physical View
  Grid > unspecified > | -- Choose a Node | ▼
                                                  Overview of unspecified @ 2014-06-18 08:58
  CPUs Total:
                 48
                                                                                                       unspecified Cluster CPU last hour
                                                                 unspecified Cluster Memory last hour
  Hosts up:
                 3
                                                                                                     100
                             unspecified Cluster Load last hour
                                                               200 G
  Hosts down:
                                                                                                      80
                            50
                                                               150 G
  Current Load Avg (15, 5, 1m):
                            40
   2%, 2%, 2%
                                                               100 G
                            30
                                                                                                     40
  Avg Utilization (last hour):
                                             unspecified
                            20
                                                                50 G
                            10
                                                                                                      16:00
                                                                           16:20
                                                                                    16:40
                                                                                                                16:20
                                                                                                                         16:40
                                               16:40
                                                                          Min:
                                                                                    13.5G
                                                                                                               Min:
                                                             ■ Share
■ Cache
                                                                     0.0
37.9G
                                                                             0.0
22.2G
                                                                                 Avg:
Avg:
                                                                                    0.0
28.7G
                                                                                            0.0
38.9G
                                                                                                          0.0%
0.5%
                                                                                                                  0.0%
0.5%
                                                                                                                     Avg:
Avg:
                                                                                                                        0.0%
0.5%
                                                                                                                            Max: 0.0%
Max: 0.6%
                                                                                         Max:
                                                                                                  ■ Nice
                                                                                                       Now:
                                                                                                               Min:
                                              Avg:706.4m
    Server Load Distribution
                                      Min:310.0m
                         ■ 1-min Now:
                                                                  Now:
                                                                                         Max:
                                                                          Min:
                                                                                                  System Now:
                                                                                                               Min:
                         Nodes
                               Now: 3.0
                                       Min: 2.0
                                              Avg: 2.4
                                                      Max: 3.
                                                                          Min: 661.5M
Min: 180.7M
                                                                     955.4M
                         CPUs
                               Now: 48.0
                                       Min: 32.0
                                              Avg: 38.2
                                                      Max: 48.
                                                                                                               Min: 0.0% Avg:
                                                                     242.4M
                                                                                    204.5M
                                                                                         Max: 242.7M
                                                                                                  ■ Steal
                                                                                                       Now:
                                                                                                           0.0%
                                                                                                                         0.0%
                                                                                 Avg: 150.1G
                                       Min: 0.0
                                                      Max:
                                                          5.
                                                             ■ Total
                                                                                                              Min: 95.4% Avg: 98.0%
                                                                  Now: 188.7G
                                                                          Min: 125.8G

□ Idle

单播意思是 多个gmond通过udp发送数据给一个特定的gmond,然后gmetad通过tcp和这台gmond请求响应。所以此时
gmetad的配置中只需要写localhost
多播意思是 所有的gmond通过广播互相udp发送、接受数据->缓存 gmetad通过pull监控下某台机器的数据存入rrd
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<u> 直点安装ganglia监控工具</u>

安装:ganglia-gmetad(ganglia-gmond)+ganglia-web+rrdtool+httpd+php

安装PHP+HTTP 见上。

服务端(master):