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# 监控工具之CACTI的应用#

[TOC]

## 1.cacti监控简述##

Cacti 是一套基于 PHP、MySQL、SNMP 及 RRDTool 开发的监测图形分析工具。它提供了非常强大的数据和用户管理功能,可以指定每一个用户能查看树状结构、主机以及任何一张图,还可以与轻量级目录服务(LDAP)结合进行用户验证,同时也能自己编写模板,功能非常强大完善界面友好。可是随着设备的不断增多,Cacti 的运行机制就不能满足我们的需求了。Cacti 是使用轮询的方式由主服务器向设备发送数据请求来获取设备上状态数据信息的,如果设备不断增多,这个轮询的过程就非常的耗时,轮询的结果就不能即时的反应设备的状态了。Cacti 监控关注的是对数据的展示,却不关注数据异常后的反馈。如果凌晨 3 点的时候设备的某个数据出现异常,除非监控人员在屏幕前发现这个异常变化, 否则是没有任何报警机制能够让我们知道出现了异常。

## 2.配置cacti运行环境##

### 1.装软件####

```
[root@servera ~]# setenforce 0
[root@servera ~]# mount 172.25.254.250:/content /mnt
[root@servera mnt]# cd /mnt/itemnew/monitor/cacti/
[root@servera cacti]# ls
cacti-0.8.8b-7.el7.noarch.rpm  php-snmp-5.4.16-23.el7_0.3.x86_64.rpm
[root@servera cacti]# yum -y localinstall *.rpm
Loaded plugins: langpacks
Examining cacti-0.8.8b-7.el7.noarch.rpm: cacti-0.8.8b-7.el7.noarch
Marking cacti-0.8.8b-7.el7.noarch.rpm to be installed
Examining php-snmp-5.4.16-23.el7_0.3.x86_64.rpm: php-snmp-5.4.16-23.el7_0.3.x86_64
Marking php-snmp-5.4.16-23.el7_0.3.x86_64.rpm to be installed
Resolving Dependencies
--> Running transaction check
----> Package cacti.noarch 0:0.8.8b-7.el7 will be installed
--> Processing Dependency: /usr/bin/php for package: cacti-0.8.8b-7.el7.noarch
rhel_dvd | 4.1 kB 00:00
(1/2): rhel_dvd/group_gz | 134 kB 00:00
(2/2): rhel_dvd/primary_db | 3.4 MB 00:02
--> Processing Dependency: httpd for package: cacti-0.8.8b-7.el7.noarch
--> Processing Dependency: mysql for package: cacti-0.8.8b-7.el7.noarch
--> Processing Dependency: net-snmp for package: cacti-0.8.8b-7.el7.noarch
--> Processing Dependency: net-snmp-utils for package: cacti-0.8.8b-7.el7.noarch
--> Processing Dependency: php for package: cacti-0.8.8b-7.el7.noarch
--> Processing Dependency: php-mysql for package: cacti-0.8.8b-7.el7.noarch
--> Processing Dependency: rrdtool for package: cacti-0.8.8b-7.el7.noarch
----> Package php-snmp.x86_64 0:5.4.16-23.el7_0.3 will be installed
--> Processing Dependency: php-common(x86-64) = 5.4.16-23.el7_0.3 for package: php-snmp-5.4.16-23.el7_0.
--> Processing Dependency: libnetsnmp.so.31()(64bit) for package: php-snmp-5.4.16-23.el7_0.3.x86_64
```

```
--> Running transaction check
----> Package httpd.x86_64 0:2.4.6-31.el7 will be installed
--> Processing Dependency: httpd-tools = 2.4.6-31.el7 for package: httpd-2.4.6-31.el7.x86_64
--> Processing Dependency: /etc/mime.types for package: httpd-2.4.6-31.el7.x86_64
--> Processing Dependency: libapr-1.so.0()(64bit) for package: httpd-2.4.6-31.el7.x86_64
--> Processing Dependency: libaprutil-1.so.0()(64bit) for package: httpd-2.4.6-31.el7.x86_64
----> Package mariadb.x86_64 1:5.5.41-2.el7_0 will be installed
----> Package net-snmp.x86_64 1:5.7.2-20.el7 will be installed
--> Processing Dependency: net-snmp-agent-libs = 1:5.7.2-20.el7 for package: 1:net-snmp-5.7.2-20.el7.x86_64
--> Processing Dependency: perl(Data::Dumper) for package: 1:net-snmp-5.7.2-20.el7.x86_64
--> Processing Dependency: libnetsnmpagent.so.31()(64bit) for package: 1:net-snmp-5.7.2-20.el7.x86_64
--> Processing Dependency: libnetsnmplib.so.31()(64bit) for package: 1:net-snmp-5.7.2-20.el7.x86_64
--> Processing Dependency: libnetsnmptrapd.so.31()(64bit) for package: 1:net-snmp-5.7.2-20.el7.x86_64
----> Package net-snmp-libs.x86_64 1:5.7.2-20.el7 will be installed
----> Package net-snmp-utils.x86_64 1:5.7.2-20.el7 will be installed
----> Package php.x86_64 0:5.4.16-23.el7_0.3 will be installed
----> Package php-cli.x86_64 0:5.4.16-23.el7_0.3 will be installed
----> Package php-common.x86_64 0:5.4.16-23.el7_0.3 will be installed
--> Processing Dependency: libzip.so.2()(64bit) for package: php-common-5.4.16-23.el7_0.3.x86_64
----> Package php-mysql.x86_64 0:5.4.16-23.el7_0.3 will be installed
--> Processing Dependency: php-pdo(x86-64) = 5.4.16-23.el7_0.3 for package: php-mysql-5.4.16-23.el7_0.3.x86_64
----> Package rrdtool.x86_64 0:1.4.8-8.el7 will be installed
--> Processing Dependency: dejavu-sans-mono-fonts for package: rrdtool-1.4.8-8.el7.x86_64
--> Processing Dependency: libcairo.so.2()(64bit) for package: rrdtool-1.4.8-8.el7.x86_64
--> Processing Dependency: libpango-1.0.so.0()(64bit) for package: rrdtool-1.4.8-8.el7.x86_64
--> Processing Dependency: libpangocairo-1.0.so.0()(64bit) for package: rrdtool-1.4.8-8.el7.x86_64
--> Running transaction check
----> Package apr.x86_64 0:1.4.8-3.el7 will be installed
----> Package apr-util.x86_64 0:1.5.2-6.el7 will be installed
----> Package cairo.x86_64 0:1.12.14-6.el7 will be installed
--> Processing Dependency: libEGL.so.1()(64bit) for package: cairo-1.12.14-6.el7.x86_64
--> Processing Dependency: libGL.so.1()(64bit) for package: cairo-1.12.14-6.el7.x86_64
--> Processing Dependency: libXext.so.6()(64bit) for package: cairo-1.12.14-6.el7.x86_64
--> Processing Dependency: libXrender.so.1()(64bit) for package: cairo-1.12.14-6.el7.x86_64
--> Processing Dependency: libfontconfig.so.1()(64bit) for package: cairo-1.12.14-6.el7.x86_64
--> Processing Dependency: libpixman-1.so.0()(64bit) for package: cairo-1.12.14-6.el7.x86_64
----> Package dejavu-sans-mono-fonts.noarch 0:2.33-6.el7 will be installed
--> Processing Dependency: dejavu-fonts-common = 2.33-6.el7 for package: dejavu-sans-mono-fonts-2.33-6.el7.noarch
----> Package httpd-tools.x86_64 0:2.4.6-31.el7 will be installed
----> Package libzip.x86_64 0:0.10.1-8.el7 will be installed
----> Package mailcap.noarch 0:2.1.41-2.el7 will be installed
----> Package net-snmp-agent-libs.x86_64 1:5.7.2-20.el7 will be installed
----> Package pango.x86_64 0:1.34.1-5.el7 will be installed
--> Processing Dependency: libthai >= 0.1.9 for package: pango-1.34.1-5.el7.x86_64
--> Processing Dependency: libthai.so.0(LIBTHAI_0.1)(64bit) for package: pango-1.34.1-5.el7.x86_64
--> Processing Dependency: libXft.so.2()(64bit) for package: pango-1.34.1-5.el7.x86_64
--> Processing Dependency: libharfbuzz.so.0()(64bit) for package: pango-1.34.1-5.el7.x86_64
--> Processing Dependency: libthai.so.0()(64bit) for package: pango-1.34.1-5.el7.x86_64
----> Package perl-Data-Dumper.x86_64 0:2.145-3.el7 will be installed
----> Package php-pdo.x86_64 0:5.4.16-23.el7_0.3 will be installed
--> Running transaction check
----> Package dejavu-fonts-common.noarch 0:2.33-6.el7 will be installed
--> Processing Dependency: fontpackages-filesystem for package: dejavu-fonts-common-2.33-6.el7.noarch
----> Package fontconfig.x86_64 0:2.10.95-7.el7 will be installed
----> Package harfbuzz.x86_64 0:0.9.20-4.el7 will be installed
--> Processing Dependency: libgraphite2.so.3()(64bit) for package: harfbuzz-0.9.20-4.el7.x86_64
----> Package libXext.x86_64 0:1.3.2-2.1.el7 will be installed
----> Package libXft.x86_64 0:2.3.1-5.1.el7 will be installed
----> Package libXrender.x86_64 0:0.9.8-2.1.el7 will be installed
----> Package libthai.x86_64 0:0.1.14-9.el7 will be installed
----> Package mesa-libEGL.x86_64 0:10.2.7-5.20140910.el7 will be installed
--> Processing Dependency: mesa-libgbm = 10.2.7-5.20140910.el7 for package: mesa-libEGL-10.2.7-5.20140910.el7.x86_64
--> Processing Dependency: libgbm.so.1()(64bit) for package: mesa-libEGL-10.2.7-5.20140910.el7.x86_64
--> Processing Dependency: libglapi.so.0()(64bit) for package: mesa-libEGL-10.2.7-5.20140910.el7.x86_64
----> Package mesa-libGL.x86_64 0:10.2.7-5.20140910.el7 will be installed
--> Processing Dependency: libXdamage.so.1()(64bit) for package: mesa-libGL-10.2.7-5.20140910.el7.x86_64
--> Processing Dependency: libXfixes.so.3()(64bit) for package: mesa-libGL-10.2.7-5.20140910.el7.x86_64
--> Processing Dependency: libXxf86vm.so.1()(64bit) for package: mesa-libGL-10.2.7-5.20140910.el7.x86_64
----> Package pixman.x86_64 0:0.32.4-3.el7 will be installed
--> Running transaction check
----> Package fontpackages-filesystem.noarch 0:1.44-8.el7 will be installed
```



----> Package graphite2.x86\_64 0:1.2.2-5.el7 will be installed  
----> Package libXdamage.x86\_64 0:1.1.4-4.1.el7 will be installed  
----> Package libXfixes.x86\_64 0:5.0.1-2.1.el7 will be installed  
----> Package libXxf86vm.x86\_64 0:1.1.3-2.1.el7 will be installed  
----> Package mesa-libgbm.x86\_64 0:10.2.7-5.20140910.el7 will be installed  
----> Package mesa-libglapi.x86\_64 0:10.2.7-5.20140910.el7 will be installed  
--> Finished Dependency Resolution

Dependencies Resolved

Package	Arch	Version	Repository	Size
Installing:				
cacti	noarch	0.8.8b-7.el7	/cacti-0.8.8b-7.el7.noarch	6.0 M
php-snmp	x86_64	5.4.16-23.el7_0.3	/php-snmp-5.4.16-23.el7_0.3.x86_64	57 k

Installing for dependencies:

apr	x86_64	1.4.8-3.el7	rhel_dvd	103 k
apr-util	x86_64	1.5.2-6.el7	rhel_dvd	92 k
cairo	x86_64	1.12.14-6.el7	rhel_dvd	697 k
dejavu-fonts-common	noarch	2.33-6.el7	rhel_dvd	64 k
dejavu-sans-mono-fonts	noarch	2.33-6.el7	rhel_dvd	433 k
fontconfig	x86_64	2.10.95-7.el7	rhel_dvd	228 k
fontpackages-filesystem	noarch	1.44-8.el7	rhel_dvd	9.9 k
graphite2	x86_64	1.2.2-5.el7	rhel_dvd	81 k
harfbuzz	x86_64	0.9.20-4.el7	rhel_dvd	145 k
httpd	x86_64	2.4.6-31.el7	rhel_dvd	1.2 M
httpd-tools	x86_64	2.4.6-31.el7	rhel_dvd	79 k
libXdamage	x86_64	1.1.4-4.1.el7	rhel_dvd	20 k
libXext	x86_64	1.3.2-2.1.el7	rhel_dvd	38 k
libXfixes	x86_64	5.0.1-2.1.el7	rhel_dvd	18 k
libXft	x86_64	2.3.1-5.1.el7	rhel_dvd	57 k
libXrender	x86_64	0.9.8-2.1.el7	rhel_dvd	26 k
libXxf86vm	x86_64	1.1.3-2.1.el7	rhel_dvd	18 k
libthai	x86_64	0.1.14-9.el7	rhel_dvd	187 k
libzip	x86_64	0.10.1-8.el7	rhel_dvd	49 k
mailcap	noarch	2.1.41-2.el7	rhel_dvd	31 k
mariadb	x86_64	1:5.5.41-2.el7_0	rhel_dvd	8.9 M
mesa-libEGL	x86_64	10.2.7-5.20140910.el7	rhel_dvd	70 k
mesa-libGL	x86_64	10.2.7-5.20140910.el7	rhel_dvd	149 k
mesa-libgbm	x86_64	10.2.7-5.20140910.el7	rhel_dvd	31 k
mesa-libglapi	x86_64	10.2.7-5.20140910.el7	rhel_dvd	37 k
net-snmp	x86_64	1:5.7.2-20.el7	rhel_dvd	319 k
net-snmp-agent-libs	x86_64	1:5.7.2-20.el7	rhel_dvd	698 k
net-snmp-libs	x86_64	1:5.7.2-20.el7	rhel_dvd	745 k
net-snmp-utils	x86_64	1:5.7.2-20.el7	rhel_dvd	196 k
pango	x86_64	1.34.1-5.el7	rhel_dvd	283 k
perl-Data-Dumper	x86_64	2.145-3.el7	rhel_dvd	47 k
php	x86_64	5.4.16-23.el7_0.3	rhel_dvd	1.3 M
php-cli	x86_64	5.4.16-23.el7_0.3	rhel_dvd	2.7 M
php-common	x86_64	5.4.16-23.el7_0.3	rhel_dvd	561 k
php-mysql	x86_64	5.4.16-23.el7_0.3	rhel_dvd	97 k
php-pdo	x86_64	5.4.16-23.el7_0.3	rhel_dvd	95 k
pixman	x86_64	0.32.4-3.el7	rhel_dvd	254 k
rrdtool	x86_64	1.4.8-8.el7	rhel_dvd	369 k

Transaction Summary

Install 2 Packages (+38 Dependent packages)

Total size: 26 M

Total download size: 20 M

Installed size: 91 M

Downloading packages:

(1/38): apr-util-1.5.2-6.el7.x86_64.rpm	92 kB	00:00
(2/38): apr-1.4.8-3.el7.x86_64.rpm	103 kB	00:00
(3/38): dejavu-fonts-common-2.33-6.el7.noarch.rpm	64 kB	00:00
(4/38): cairo-1.12.14-6.el7.x86_64.rpm	697 kB	00:00
(5/38): dejavu-sans-mono-fonts-2.33-6.el7.noarch.rpm	433 kB	00:00

(6/38): fontpackages-filesystem-1.44-8.el7.noarch.rpm	9.9 kB	00:00
(7/38): fontconfig-2.10.95-7.el7.x86_64.rpm	228 kB	00:00
(8/38): graphite2-1.2.2-5.el7.x86_64.rpm	81 kB	00:00
(9/38): harfbuzz-0.9.20-4.el7.x86_64.rpm	145 kB	00:00
(10/38): httpd-tools-2.4.6-31.el7.x86_64.rpm	79 kB	00:00
(11/38): httpd-2.4.6-31.el7.x86_64.rpm	1.2 MB	00:00
(12/38): libXdamage-1.1.4-4.1.el7.x86_64.rpm	20 kB	00:00
(13/38): libXext-1.3.2-2.1.el7.x86_64.rpm	38 kB	00:00
(14/38): libXfixes-5.0.1-2.1.el7.x86_64.rpm	18 kB	00:00
(15/38): libXft-2.3.1-5.1.el7.x86_64.rpm	57 kB	00:00
(16/38): libXrender-0.9.8-2.1.el7.x86_64.rpm	26 kB	00:00
(17/38): libXxf86vm-1.1.3-2.1.el7.x86_64.rpm	18 kB	00:00
(18/38): libzip-0.10.1-8.el7.x86_64.rpm	49 kB	00:00
(19/38): libthai-0.1.14-9.el7.x86_64.rpm	187 kB	00:00
(20/38): mailcap-2.1.41-2.el7.noarch.rpm	31 kB	00:00
(21/38): mesa-libEGL-10.2.7-5.20140910.el7.x86_64.rpm	70 kB	00:01
(22/38): mesa-libGL-10.2.7-5.20140910.el7.x86_64.rpm	149 kB	00:00
(23/38): mesa-libgbm-10.2.7-5.20140910.el7.x86_64.rpm	31 kB	00:00
(24/38): mesa-libglapi-10.2.7-5.20140910.el7.x86_64.rpm	37 kB	00:00
(25/38): mariadb-5.5.41-2.el7_0.x86_64.rpm	8.9 MB	00:01
(26/38): net-snmp-5.7.2-20.el7.x86_64.rpm	319 kB	00:00
(27/38): net-snmp-agent-libs-5.7.2-20.el7.x86_64.rpm	698 kB	00:00
(28/38): net-snmp-utils-5.7.2-20.el7.x86_64.rpm	196 kB	00:00
(29/38): net-snmp-libs-5.7.2-20.el7.x86_64.rpm	745 kB	00:00
(30/38): pango-1.34.1-5.el7.x86_64.rpm	283 kB	00:00
(31/38): perl-Data-Dumper-2.145-3.el7.x86_64.rpm	47 kB	00:00
(32/38): php-5.4.16-23.el7_0.3.x86_64.rpm	1.3 MB	00:00
(33/38): php-common-5.4.16-23.el7_0.3.x86_64.rpm	561 kB	00:00
(34/38): php-mysql-5.4.16-23.el7_0.3.x86_64.rpm	97 kB	00:00
(35/38): php-pdo-5.4.16-23.el7_0.3.x86_64.rpm	95 kB	00:00
(36/38): php-cli-5.4.16-23.el7_0.3.x86_64.rpm	2.7 MB	00:00
(37/38): pixman-0.32.4-3.el7.x86_64.rpm	254 kB	00:00
(38/38): rrdtool-1.4.8-8.el7.x86_64.rpm	369 kB	00:00

Total 4.0 MB/s | 20 MB 00:05

Running transaction check

Running transaction **test**

Transaction **test** succeeded

Running transaction

Installing : 1:net-snmp-libs-5.7.2-20.el7.x86_64	1/40
Installing : libXext-1.3.2-2.1.el7.x86_64	2/40
Installing : mesa-libglapi-10.2.7-5.20140910.el7.x86_64	3/40
Installing : libXrender-0.9.8-2.1.el7.x86_64	4/40
Installing : apr-1.4.8-3.el7.x86_64	5/40
Installing : apr-util-1.5.2-6.el7.x86_64	6/40
Installing : libXfixes-5.0.1-2.1.el7.x86_64	7/40
Installing : fontpackages-filesystem-1.44-8.el7.noarch	8/40
Installing : fontconfig-2.10.95-7.el7.x86_64	9/40
Installing : libXft-2.3.1-5.1.el7.x86_64	10/40
Installing : dejavu-fonts-common-2.33-6.el7.noarch	11/40
Installing : dejavu-sans-mono-fonts-2.33-6.el7.noarch	12/40
Installing : libXdamage-1.1.4-4.1.el7.x86_64	13/40
Installing : httpd-tools-2.4.6-31.el7.x86_64	14/40
Installing : mesa-libgbm-10.2.7-5.20140910.el7.x86_64	15/40
Installing : mesa-libEGL-10.2.7-5.20140910.el7.x86_64	16/40
Installing : libXxf86vm-1.1.3-2.1.el7.x86_64	17/40
Installing : mesa-libGL-10.2.7-5.20140910.el7.x86_64	18/40
Installing : 1:net-snmp-utils-5.7.2-20.el7.x86_64	19/40
Installing : 1:net-snmp-agent-libs-5.7.2-20.el7.x86_64	20/40
Installing : libzip-0.10.1-8.el7.x86_64	21/40
Installing : php-common-5.4.16-23.el7_0.3.x86_64	22/40
Installing : php-cli-5.4.16-23.el7_0.3.x86_64	23/40
Installing : php-pdo-5.4.16-23.el7_0.3.x86_64	24/40
Installing : php-mysql-5.4.16-23.el7_0.3.x86_64	25/40
Installing : perl-Data-Dumper-2.145-3.el7.x86_64	26/40
Installing : 1:net-snmp-5.7.2-20.el7.x86_64	27/40
Installing : php-snmp-5.4.16-23.el7_0.3.x86_64	28/40
Installing : graphite2-1.2.2-5.el7.x86_64	29/40
Installing : harfbuzz-0.9.20-4.el7.x86_64	30/40
Installing : 1:mariadb-5.5.41-2.el7_0.x86_64	31/40
Installing : libthai-0.1.14-9.el7.x86_64	32/40

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Installing : pixman-0.32.4-3.el7.x86_64 33/40
Installing : cairo-1.12.14-6.el7.x86_64 34/40
Installing : pango-1.34.1-5.el7.x86_64 35/40
Installing : rrdtool-1.4.8-8.el7.x86_64 36/40
Installing : mailcap-2.1.41-2.el7.noarch 37/40
Installing : httpd-2.4.6-31.el7.x86_64 38/40
Installing : php-5.4.16-23.el7_0.3.x86_64 39/40
Installing : cacti-0.8.8b-7.el7.noarch 40/40
```

/var/tmp/rpm-tmp.lBEi9C: line 1: fg: no job control

warning: %post(cacti-0.8.8b-7.el7.noarch) scriptlet failed, [exit](#) status 1

Non-fatal POSTIN scriptlet failure [in](#) rpm package cacti-0.8.8b-7.el7.noarch

```
Verifying : 1:net-snmp-utils-5.7.2-20.el7.x86_64 1/40
Verifying : harfbuzz-0.9.20-4.el7.x86_64 2/40
Verifying : mailcap-2.1.41-2.el7.noarch 3/40
Verifying : pixman-0.32.4-3.el7.x86_64 4/40
Verifying : libXxf86vm-1.1.3-2.1.el7.x86_64 5/40
Verifying : dejavu-fonts-common-2.33-6.el7.noarch 6/40
Verifying : fontpackages-filesystem-1.44-8.el7.noarch 7/40
Verifying : php-common-5.4.16-23.el7_0.3.x86_64 8/40
Verifying : php-pdo-5.4.16-23.el7_0.3.x86_64 9/40
Verifying : apr-1.4.8-3.el7.x86_64 10/40
Verifying : libXft-2.3.1-5.1.el7.x86_64 11/40
Verifying : httpd-tools-2.4.6-31.el7.x86_64 12/40
Verifying : cacti-0.8.8b-7.el7.noarch 13/40
Verifying : libthai-0.1.14-9.el7.x86_64 14/40
Verifying : php-mysql-5.4.16-23.el7_0.3.x86_64 15/40
Verifying : php-cli-5.4.16-23.el7_0.3.x86_64 16/40
Verifying : libXrender-0.9.8-2.1.el7.x86_64 17/40
Verifying : cairo-1.12.14-6.el7.x86_64 18/40
Verifying : mesa-libglapi-10.2.7-5.20140910.el7.x86_64 19/40
Verifying : 1:mariadb-5.5.41-2.el7_0.x86_64 20/40
Verifying : php-snmp-5.4.16-23.el7_0.3.x86_64 21/40
Verifying : graphite2-1.2.2-5.el7.x86_64 22/40
Verifying : perl-Data-Dumper-2.145-3.el7.x86_64 23/40
Verifying : php-5.4.16-23.el7_0.3.x86_64 24/40
Verifying : pango-1.34.1-5.el7.x86_64 25/40
Verifying : apr-util-1.5.2-6.el7.x86_64 26/40
Verifying : mesa-libEGL-10.2.7-5.20140910.el7.x86_64 27/40
Verifying : mesa-libgbm-10.2.7-5.20140910.el7.x86_64 28/40
Verifying : 1:net-snmp-5.7.2-20.el7.x86_64 29/40
Verifying : dejavu-sans-mono-fonts-2.33-6.el7.noarch 30/40
Verifying : libXfixes-5.0.1-2.1.el7.x86_64 31/40
Verifying : rrdtool-1.4.8-8.el7.x86_64 32/40
Verifying : httpd-2.4.6-31.el7.x86_64 33/40
Verifying : libXext-1.3.2-2.1.el7.x86_64 34/40
Verifying : fontconfig-2.10.95-7.el7.x86_64 35/40
Verifying : mesa-libGL-10.2.7-5.20140910.el7.x86_64 36/40
Verifying : libzip-0.10.1-8.el7.x86_64 37/40
Verifying : 1:net-snmp-agent-libs-5.7.2-20.el7.x86_64 38/40
Verifying : libXdamage-1.1.4-4.1.el7.x86_64 39/40
Verifying : 1:net-snmp-libs-5.7.2-20.el7.x86_64 40/40
```

Installed:

cacti.noarch 0:0.8.8b-7.el7 php-snmp.x86\_64 0:5.4.16-23.el7\_0.3

Dependency Installed:

```
apr.x86_64 0:1.4.8-3.el7
apr-util.x86_64 0:1.5.2-6.el7
cairo.x86_64 0:1.12.14-6.el7
dejavu-fonts-common.noarch 0:2.33-6.el7
dejavu-sans-mono-fonts.noarch 0:2.33-6.el7
fontconfig.x86_64 0:2.10.95-7.el7
fontpackages-filesystem.noarch 0:1.44-8.el7
graphite2.x86_64 0:1.2.2-5.el7
harfbuzz.x86_64 0:0.9.20-4.el7
httpd.x86_64 0:2.4.6-31.el7
httpd-tools.x86_64 0:2.4.6-31.el7
libXdamage.x86_64 0:1.1.4-4.1.el7
libXext.x86_64 0:1.3.2-2.1.el7
libXfixes.x86_64 0:5.0.1-2.1.el7
libXft.x86_64 0:2.3.1-5.1.el7
```



```
libXrender.x86_64 0:0.9.8-2.1.el7
libXxf86vm.x86_64 0:1.1.3-2.1.el7
libthai.x86_64 0:0.1.14-9.el7
libzip.x86_64 0:0.10.1-8.el7
mailcap.noarch 0:2.1.41-2.el7
mariadb.x86_64 1:5.5.41-2.el7_0
mesa-libEGL.x86_64 0:10.2.7-5.20140910.el7
mesa-libGL.x86_64 0:10.2.7-5.20140910.el7
mesa-libgbm.x86_64 0:10.2.7-5.20140910.el7
mesa-libglapi.x86_64 0:10.2.7-5.20140910.el7
net-snmp.x86_64 1:5.7.2-20.el7
net-snmp-agent-libs.x86_64 1:5.7.2-20.el7
net-snmp-libs.x86_64 1:5.7.2-20.el7
net-snmp-utils.x86_64 1:5.7.2-20.el7
pango.x86_64 0:1.34.1-5.el7
perl-Data-Dumper.x86_64 0:2.145-3.el7
php.x86_64 0:5.4.16-23.el7_0.3
php-cli.x86_64 0:5.4.16-23.el7_0.3
php-common.x86_64 0:5.4.16-23.el7_0.3
php-mysql.x86_64 0:5.4.16-23.el7_0.3
php-pdo.x86_64 0:5.4.16-23.el7_0.3
pixman.x86_64 0:0.32.4-3.el7
rrdtool.x86_64 0:1.4.8-8.el7
```

Complete!

```
[root@servera cacti]# yum -y install mariadb-server
```

Loaded plugins: langpacks

Resolving Dependencies

--> Running transaction check

----> Package mariadb-server.x86\_64 1:5.5.41-2.el7\_0 will be installed

--> Processing Dependency: perl(DBI) **for** package: 1:mariadb-server-5.5.41-2.el7\_0.x86\_64

--> Processing Dependency: perl-DBD-MySQL **for** package: 1:mariadb-server-5.5.41-2.el7\_0.x86\_64

--> Processing Dependency: perl-DBI **for** package: 1:mariadb-server-5.5.41-2.el7\_0.x86\_64

--> Running transaction check

----> Package perl-DBD-MySQL.x86\_64 0:4.023-5.el7 will be installed

----> Package perl-DBI.x86\_64 0:1.627-4.el7 will be installed

--> Processing Dependency: perl(RPC::PlClient) **>= 0.2000 for** package: perl-DBI-1.627-4.el7.x86\_64

--> Processing Dependency: perl(RPC::PlServer) **>= 0.2001 for** package: perl-DBI-1.627-4.el7.x86\_64

--> Running transaction check

----> Package perl-PlRPC.noarch 0:0.2020-14.el7 will be installed

--> Processing Dependency: perl(Net::Daemon) **>= 0.13 for** package: perl-PlRPC-0.2020-14.el7.noarch

--> Processing Dependency: perl(Compress::Zlib) **for** package: perl-PlRPC-0.2020-14.el7.noarch

--> Processing Dependency: perl(Net::Daemon::Log) **for** package: perl-PlRPC-0.2020-14.el7.noarch

--> Processing Dependency: perl(Net::Daemon::Test) **for** package: perl-PlRPC-0.2020-14.el7.noarch

--> Running transaction check

----> Package perl-IO-Compress.noarch 0:2.061-2.el7 will be installed

--> Processing Dependency: perl(Compress::Raw::Bzip2) **>= 2.061 for** package: perl-IO-Compress-2.061-2.el7

--> Processing Dependency: perl(Compress::Raw::Zlib) **>= 2.061 for** package: perl-IO-Compress-2.061-2.el7

----> Package perl-Net-Daemon.noarch 0:0.48-5.el7 will be installed

--> Running transaction check

----> Package perl-Compress-Raw-Bzip2.x86\_64 0:2.061-3.el7 will be installed

----> Package perl-Compress-Raw-Zlib.x86\_64 1:2.061-4.el7 will be installed

--> Finished Dependency Resolution

Dependencies Resolved

Package	Arch	Version	Repository	Size
Installing:				
mariadb-server	x86_64	1:5.5.41-2.el7_0	rhel_dvd	11 M
Installing <b>for</b> dependencies:				
perl-Compress-Raw-Bzip2	x86_64	2.061-3.el7	rhel_dvd	32 k
perl-Compress-Raw-Zlib	x86_64	1:2.061-4.el7	rhel_dvd	57 k
perl-DBD-MySQL	x86_64	4.023-5.el7	rhel_dvd	140 k
perl-DBI	x86_64	1.627-4.el7	rhel_dvd	802 k
perl-IO-Compress	noarch	2.061-2.el7	rhel_dvd	260 k
perl-Net-Daemon	noarch	0.48-5.el7	rhel_dvd	51 k
perl-PlRPC	noarch	0.2020-14.el7	rhel_dvd	36 k

Transaction Summary

```
=====
Install 1 Package (+7 Dependent packages)

Total download size: 12 M
Installed size: 59 M
Downloading packages:
(1/8): perl-Compress-Raw-Bzip2-2.061-3.el7.x86_64.rpm | 32 kB 00:00
(2/8): perl-Compress-Raw-Zlib-2.061-4.el7.x86_64.rpm | 57 kB 00:00
(3/8): mariadb-server-5.5.41-2.el7_0.x86_64.rpm | 11 MB 00:00
(4/8): perl-DBD-MySQL-4.023-5.el7.x86_64.rpm | 140 kB 00:00
(5/8): perl-DBI-1.627-4.el7.x86_64.rpm | 802 kB 00:00
(6/8): perl-IO-Compress-2.061-2.el7.noarch.rpm | 260 kB 00:00
(7/8): perl-Net-Daemon-0.48-5.el7.noarch.rpm | 51 kB 00:00
(8/8): perl-PlRPC-0.2020-14.el7.noarch.rpm | 36 kB 00:00
-----
Total 11 MB/s | 12 MB 00:01
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : perl-Compress-Raw-Bzip2-2.061-3.el7.x86_64 1/8
  Installing : 1:perl-Compress-Raw-Zlib-2.061-4.el7.x86_64 2/8
  Installing : perl-IO-Compress-2.061-2.el7.noarch 3/8
  Installing : perl-Net-Daemon-0.48-5.el7.noarch 4/8
  Installing : perl-PlRPC-0.2020-14.el7.noarch 5/8
  Installing : perl-DBI-1.627-4.el7.x86_64 6/8
  Installing : perl-DBD-MySQL-4.023-5.el7.x86_64 7/8
  Installing : 1:mariadb-server-5.5.41-2.el7_0.x86_64 8/8
  Verifying : perl-Net-Daemon-0.48-5.el7.noarch 1/8
  Verifying : 1:mariadb-server-5.5.41-2.el7_0.x86_64 2/8
  Verifying : perl-IO-Compress-2.061-2.el7.noarch 3/8
  Verifying : 1:perl-Compress-Raw-Zlib-2.061-4.el7.x86_64 4/8
  Verifying : perl-PlRPC-0.2020-14.el7.noarch 5/8
  Verifying : perl-DBI-1.627-4.el7.x86_64 6/8
  Verifying : perl-Compress-Raw-Bzip2-2.061-3.el7.x86_64 7/8
  Verifying : perl-DBD-MySQL-4.023-5.el7.x86_64 8/8

Installed:
  mariadb-server.x86_64 1:5.5.41-2.el7_0

Dependency Installed:
  perl-Compress-Raw-Bzip2.x86_64 0:2.061-3.el7
  perl-Compress-Raw-Zlib.x86_64 1:2.061-4.el7
  perl-DBD-MySQL.x86_64 0:4.023-5.el7
  perl-DBI.x86_64 0:1.627-4.el7
  perl-IO-Compress.noarch 0:2.061-2.el7
  perl-Net-Daemon.noarch 0:0.48-5.el7
  perl-PlRPC.noarch 0:0.2020-14.el7

Complete!
```

2.配置mysql数据库####

```
[root@servera cacti]# mysql
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 2
Server version: 5.5.41-MariaDB MariaDB Server

Copyright (c) 2000, 2014, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> create database cacti;
Query OK, 1 row affected (0.00 sec)

MariaDB [(none)]> grant all on cacti.* to cacti@'localhost' identified by 'uplooking';
Query OK, 0 rows affected (0.00 sec)

MariaDB [(none)]> flush privileges;
```

Query OK, 0 rows affected (0.00 sec)

MariaDB [(none)]> Bye

[root@servera cacti]# mysql cacti < /usr/share/doc/cacti-0.8.8b/cacti.sql

### 3.配置cacti的相关参数####

```
[root@servera cacti]# vim /etc/cacti/db.php
<?php
$database_type = "mysql";
$database_default = "cacti";
$database_hostname = "localhost";
$database_username = "cacti";
$database_password = "uplooking";
$database_port = "3306";
$database_ssl = false;
?>
[root@servera cacti]# cd /etc/httpd/conf.d/
[root@servera conf.d]# ls
autoindex.conf  cacti.conf  php.conf  README  userdir.conf  welcome.conf
[root@servera conf.d]# vim cacti.conf

Alias /cacti      /usr/share/cacti

<Directory /usr/share/cacti/>
    <IfModule mod_authz_core.c>
        # httpd 2.4
        #       Require host localhost
        #       Require ip 172.25.0.9
    </IfModule>
    <IfModule !mod_authz_core.c>
        # httpd 2.2
        Order deny,allow
        Deny from all
        Allow from localhost
    </IfModule>
    <IfModule !mod_authz_core.c>
        # httpd 2.2
        Order deny,allow
        Deny from all
        Allow from localhost
    </IfModule>
</Directory>
<Directory /usr/share/cacti/install>
    # mod_security overrides.
    # Uncomment these if you use mod_security.
    # allow POST of application/x-www-form-urlencoded during install
    #SecRuleRemoveById 960010
    # permit the specification of the rrdtool paths during install
    #SecRuleRemoveById 900011
</Directory>
<Directory /usr/share/cacti/log>
    <IfModule mod_authz_core.c>
        Require all denied
    </IfModule>
    <IfModule !mod_authz_core.c>
        Order deny,allow
        Deny from all
    </IfModule>
</Directory>
<Directory /usr/share/cacti/rra>
    <IfModule mod_authz_core.c>
        Require all denied
    </IfModule>
    <IfModule !mod_authz_core.c>
        Order deny,allow
        Deny from all
    </IfModule>
</Directory>
```



4.配置php时区####

```
[root@servera conf.d]# timedatectl set-timezone Asia/Shanghai
[root@servera conf.d]# vim /etc/php.ini
[Date]
; Defines the default timezone used by the date functions
; http://php.net/date.timezone
date.timezone = Asia/Shanghai
```

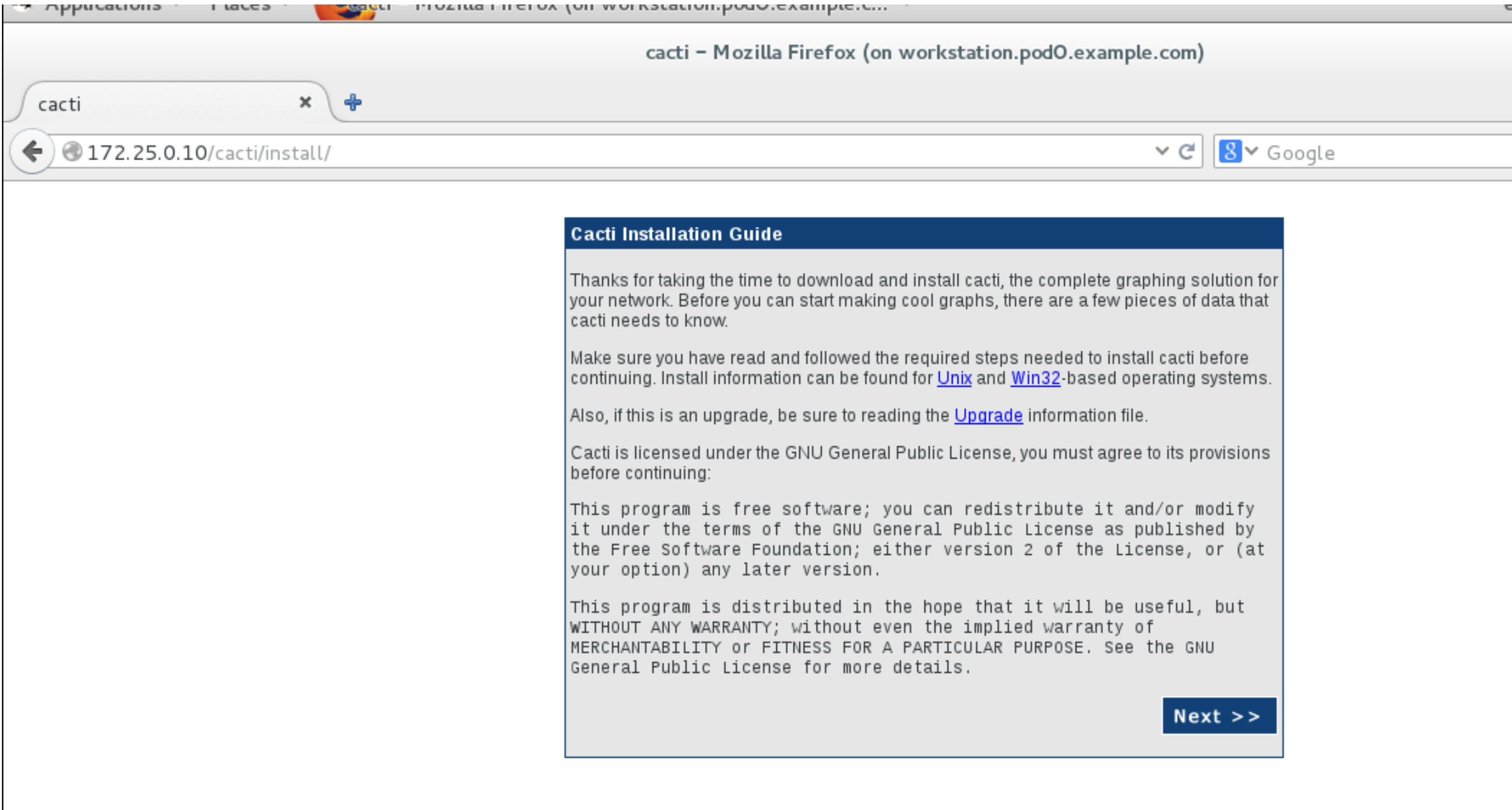
5.变更计划任务 --> 让其五分钟出一次图####

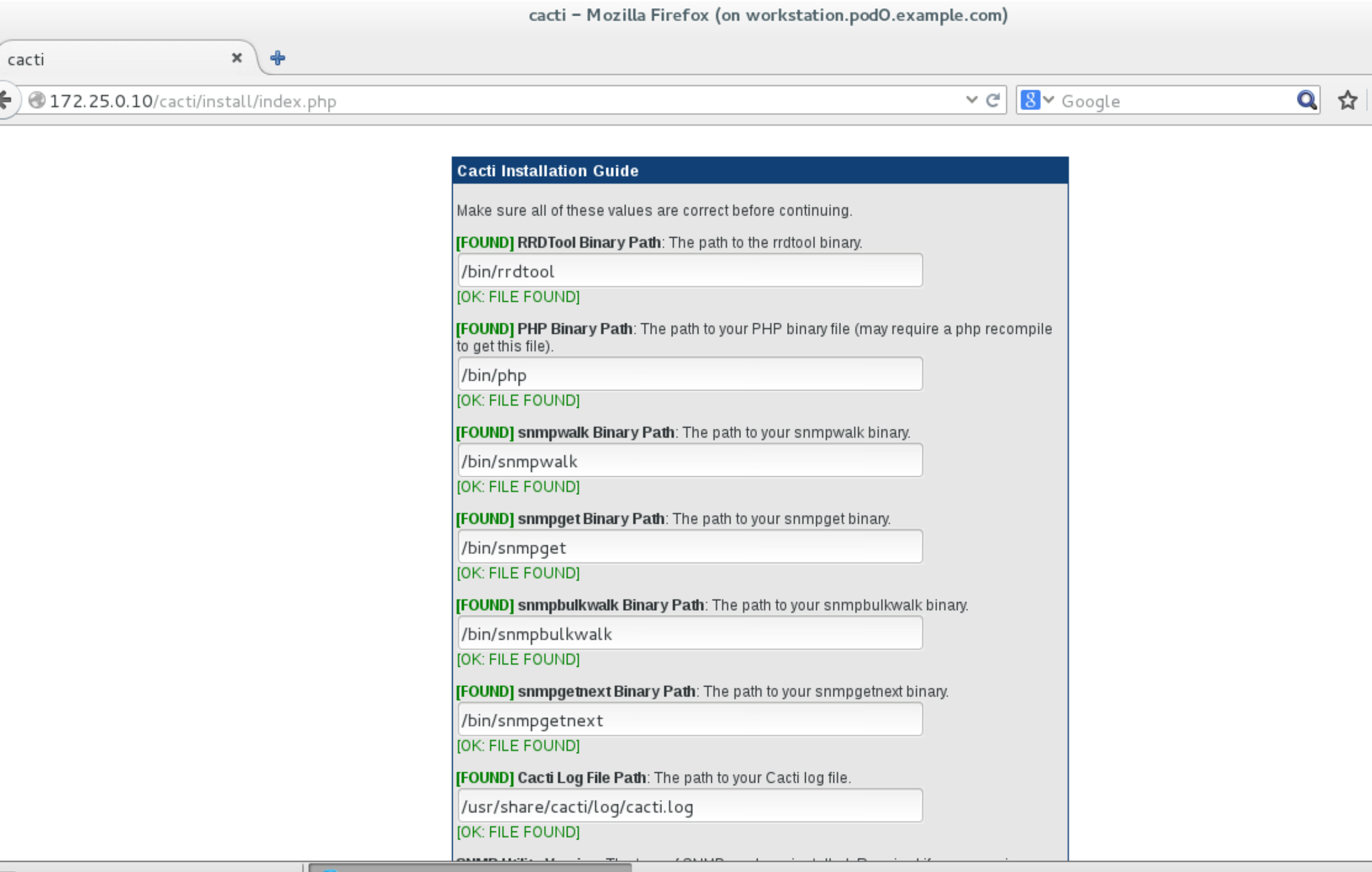
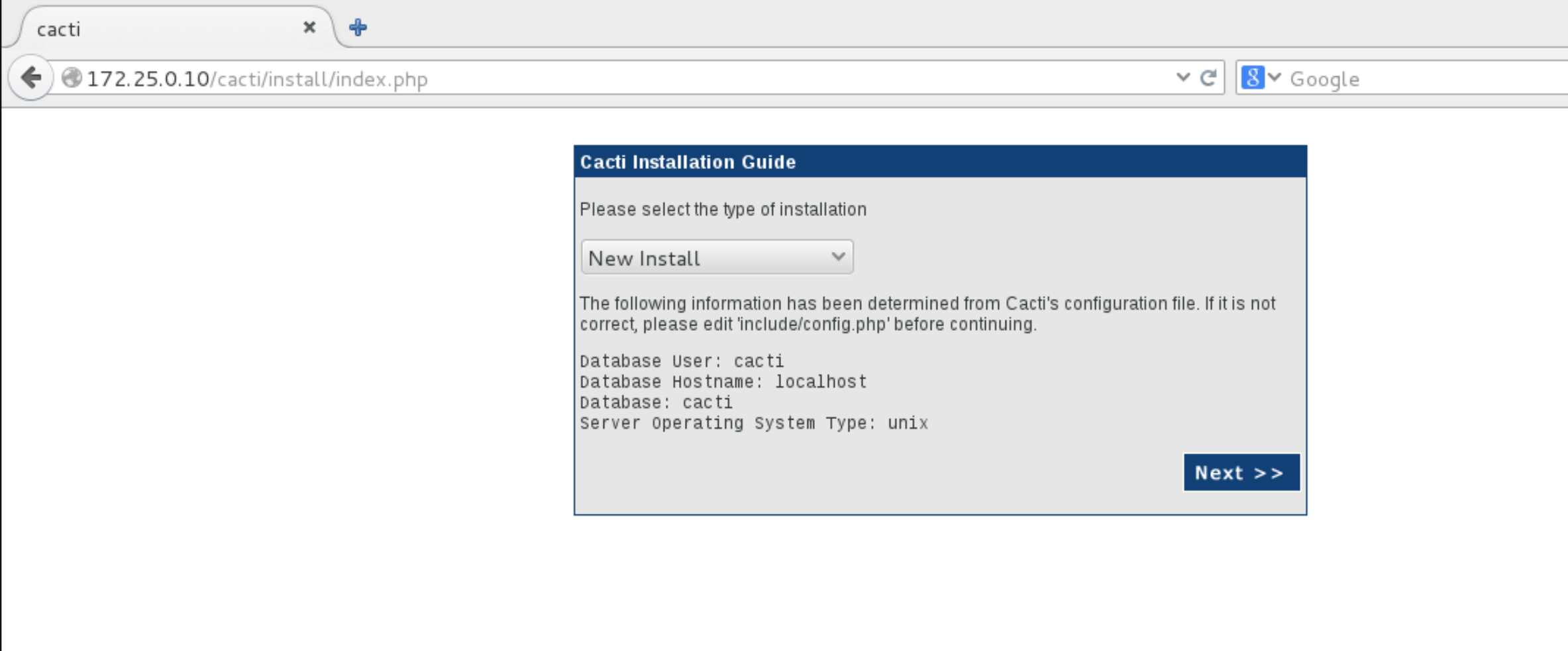
```
[root@servera ~]# cat /etc/cron.d/cacti
*/5 * * * * cacti /usr/bin/php /usr/share/cacti/poller.php > /dev/null 2>&1
[root@servera ~]# vim /etc/cron.d/cacti
[root@servera ~]# cat /etc/cron.d/cacti
*/5 * * * * cacti /usr/bin/php /usr/share/cacti/poller.php > /dev/null 2>&1
```

6.启动服务####

```
[root@servera conf.d]# systemctl restart httpd
[root@servera conf.d]# systemctl restart snmpd
```

7.访问测试：通过 workstation来访问：####





初始用户名为admin，密码也为admin



## User Login

Please enter your Cacti user name and password below:

User Name:

Password:

Login

## 配置cacti监控本地服务器

cacti在监控过程当中，是采取snmp协议来获取数据，即本地需要支持snmp协议。

```
[root@servera cacti]# rpm -q net-snmp net-snmp-utils
net-snmp-5.7.2-20.el7.x86_64
net-snmp-utils-5.7.2-20.el7.x86_64
```

修改snmp主配置文件如下

```
[root@servera cacti]# vim /etc/snmp/snmpd.conf

com2sec notConfigUser  default      public

####
# Second, map the security name into a group name:

#      groupName      securityModel securityName
group  notConfigGroup v1          notConfigUser
group  notConfigGroup v2c          notConfigUser
view   systemview      included    .1
[root@servera cacti]# systemctl restart snmpd
```

点击左边device，选择localhost，看到如下界面，在snmp options这里选择snmp version2:



Console -> Devices -> (Edit) - Mozilla Firefox (on workstation.pod0.example.com)

Console -> Devices -> Red Hat

172.25.0.10/cacti/host.php?action=edit&id=1

Google

Management

Graph Management

Graph Trees

Data Sources

Devices

Collection Methods

Data Queries

Data Input Methods

Templates

Graph Templates

Host Templates

Data Templates

Import/Export

Import Templates

Export Templates

Configuration

Settings

Plugin Management

Utilities

System Utilities

User Management

Logout User

system:linux-server:pod0.example.com 0.10.0-222.el7.x86\_64 18:37:38 EST 2015 x86\_64

Uptime: 723232 (0 days, 2 hours, 0 minutes)

Hostname: servera.pod0.example.com

Location: Unknown (edit /etc/snmp/snmpd.conf)

Contact: Root root@localhost (configure /etc/snmp/snmp.local.conf)

Devices [edit: Localhost]

General Host Options

Description

Give this host a meaningful description.

Localhost

Hostname

Fully qualified hostname or IP address for this device.

127.0.0.1

Host Template

Choose the Host Template to use to define the default Graph Templates and Data Queries associated with this Host.

Local Linux Machine

Number of Collection Threads

The number of concurrent threads to use for polling this device. This applies to the Spine poller only.

1 Thread (default)

Disable Host

Check this box to disable all checks for this host.

☐ Disable Host

Availability/Reachability Options

Downed Device Detection

The method Cacti will use to determine if a host is available for polling.

NOTE: It is recommended that, at a minimum, SNMP always be selected.

SNMP Uptime

Ping Timeout Value

The timeout value to use for host ICMP and UDP ping. This host SNMP timeout value applies for SNMP pings.

400

Ping Retry Count

After an initial failure, the number of ping retries Cacti will attempt before failing.

1

SNMP Options

SNMP Version

Choose the SNMP version for this device.

Version 2

SNMP Community

SNMP read community for this device.

public

SNMP Port

Enter the UDP port number to use for SNMP (default is 161).

161

SNMP Timeout


The maximum number of milliseconds Cacti will wait for an SNMP response (does not work with php-snmp support).

500

Maximum OID's Per Get Request

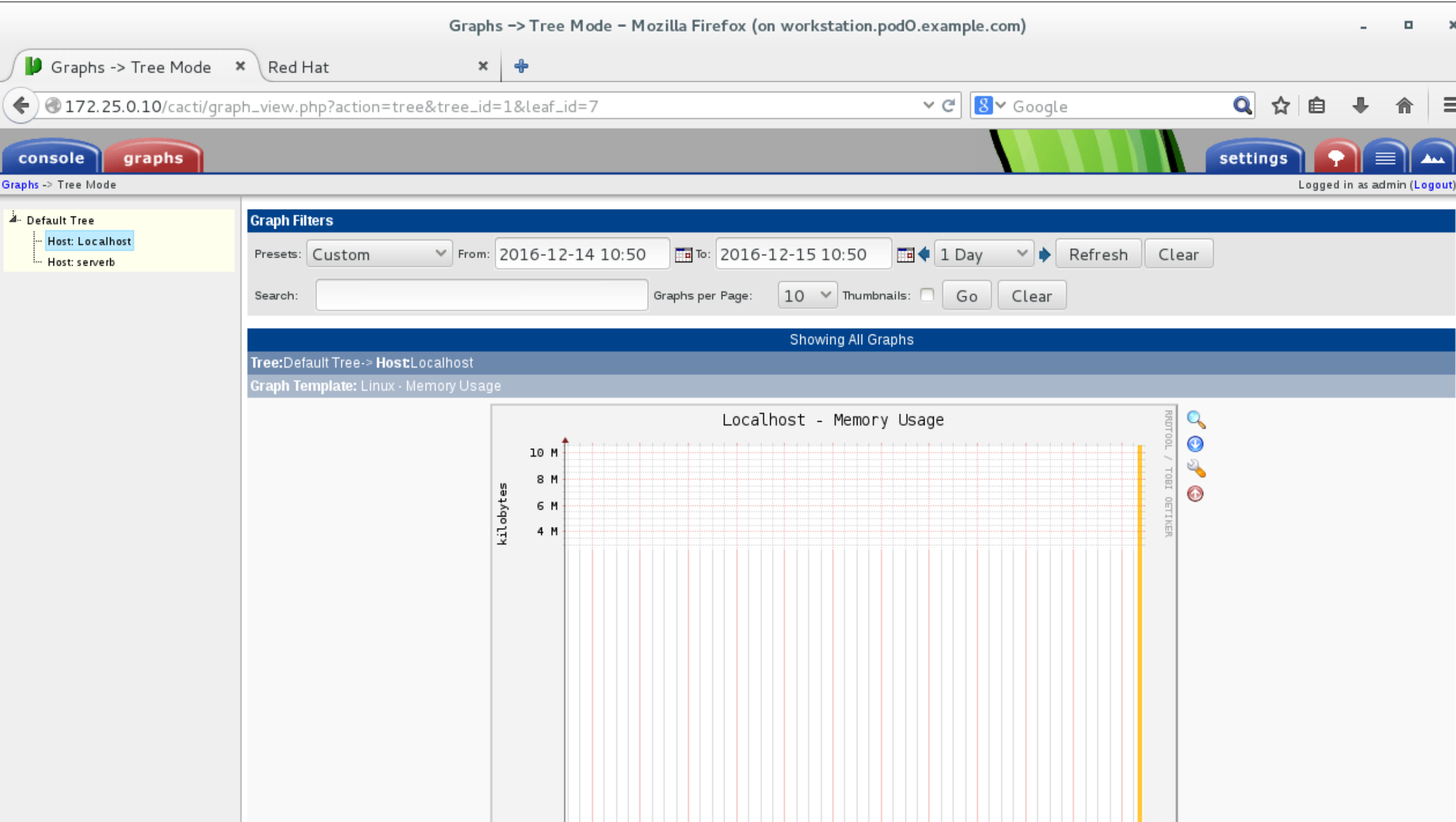
Specified the number of OID's that can be obtained in a single SNMP Get request.

10



[\\*Data Source List](#)  
[\\*Graph List](#)

等五到十分钟，点击上方graphs，查看监控图形：



## 配置cacti监控远程服务器

环境：servera作为cacti服务器，serverb为被监控节点

在受监控节点上我们安装snmp相关软件

```
[root@serverb ~]# getenforce
Enforcing
[root@serverb ~]# setenforce 0
[root@serverb ~]# yum -y install net-snmp net-snmp-utils

[root@serverb ~]# vim /etc/snmp/snmpd.conf

com2sec notConfigUser default public
```

```
####
# Second, map the security name into a group name:

#      groupName      securityModel securityName
group  notConfigGroup v1          notConfigUser
group  notConfigGroup v2c         notConfigUser
view   systemview      included    .1
[root@serverb ~]# systemctl restart snmpd
```

我们需要在 cacti 上设置新设备。首先使用浏览器登录 Cacti，然后在左侧“Management” 部分里点选“ Devices” ,然后在右上角点选“ Add”，填入ip地址等相关信息。

Data Input Methods

Templates

Graph Templates

Host Templates

Data Templates

Import/Export

Import Templates

Export Templates

Configuration

Settings


Plugin Management

Utilities

System Utilities

User Management

Logout User



Description

Give this host a meaningful description.

serverb

Hostname

Fully qualified hostname or IP address for this device.

172.25.0.11

Host Template

Choose the Host Template to use to define the default Graph Templates and Data Queries associated with this Host.

None

Number of Collection Threads

The number of concurrent threads to use for polling this device. This applies to the Spine poller only.

1 Thread (default)

Disable Host

Check this box to disable all checks for this host.

☐ Disable Host

Availability/Reachability Options

Downed Device Detection

The method Cacti will use to determine if a host is available for polling.  
*NOTE: It is recommended that, at a minimum, SNMP always be selected.*

SNMP Uptime

Ping Timeout Value

The timeout value to use for host ICMP and UDP pingging. This host SNMP timeout value applies for SNMP pings.

400

Ping Retry Count

After an initial failure, the number of ping retries Cacti will attempt before failing.

1

SNMP Options

SNMP Version

Choose the SNMP version for this device.

Version 2

SNMP Community

SNMP read community for this device.

public

SNMP Port

Enter the UDP port number to use for SNMP (default is 161).

161

SNMP Timeout

The maximum number of milliseconds Cacti will wait for an SNMP response (does not work with php-snmp support).

500

Maximum OID's Per Get Request

Specified the number of OID's that can be obtained in a single SNMP Get request.


10

Additional Options

Notes

Enter notes to this host.

接下来，选择监控项，选择完成后点击save：



SNMP Port

Enter the UDP port number to use for SNMP (default is 161).

161

SNMP Timeout

The maximum number of milliseconds Cacti will wait for an SNMP response (does not work with php-snmp support).

500

Maximum OID's Per Get Request

Specified the number of OID's that can be obtained in a single SNMP Get request.

10

Additional Options

Notes

Enter notes to this host.

Associated Graph Templates

Graph Template Name	Status
1) Netware - File System Cache	Is Being Graphed (Edit)
2) ucd/net - CPU Usage	Is Being Graphed (Edit)
3) Unix - Load Average	Is Being Graphed (Edit)

Add Graph Template:

Cisco - CPU Usage

Add

Associated Data Queries

Data Query Name	Debugging	Re-Index Method	Status
1) SNMP - Get Mounted Partitions	(Verbose Query)	Uptime Goes Backwards	Success [30 Items, 10 Rows]
2) SNMP - Get Processor Information	(Verbose Query)	Uptime Goes Backwards	Success [2 Items, 2 Rows]
3) SNMP - Interface Statistics	(Verbose Query)	Uptime Goes Backwards	Success [40 Items, 4 Rows]

Add Data Query:

Karlnet - Wireless Bridge Statistics

Re-Index Method:

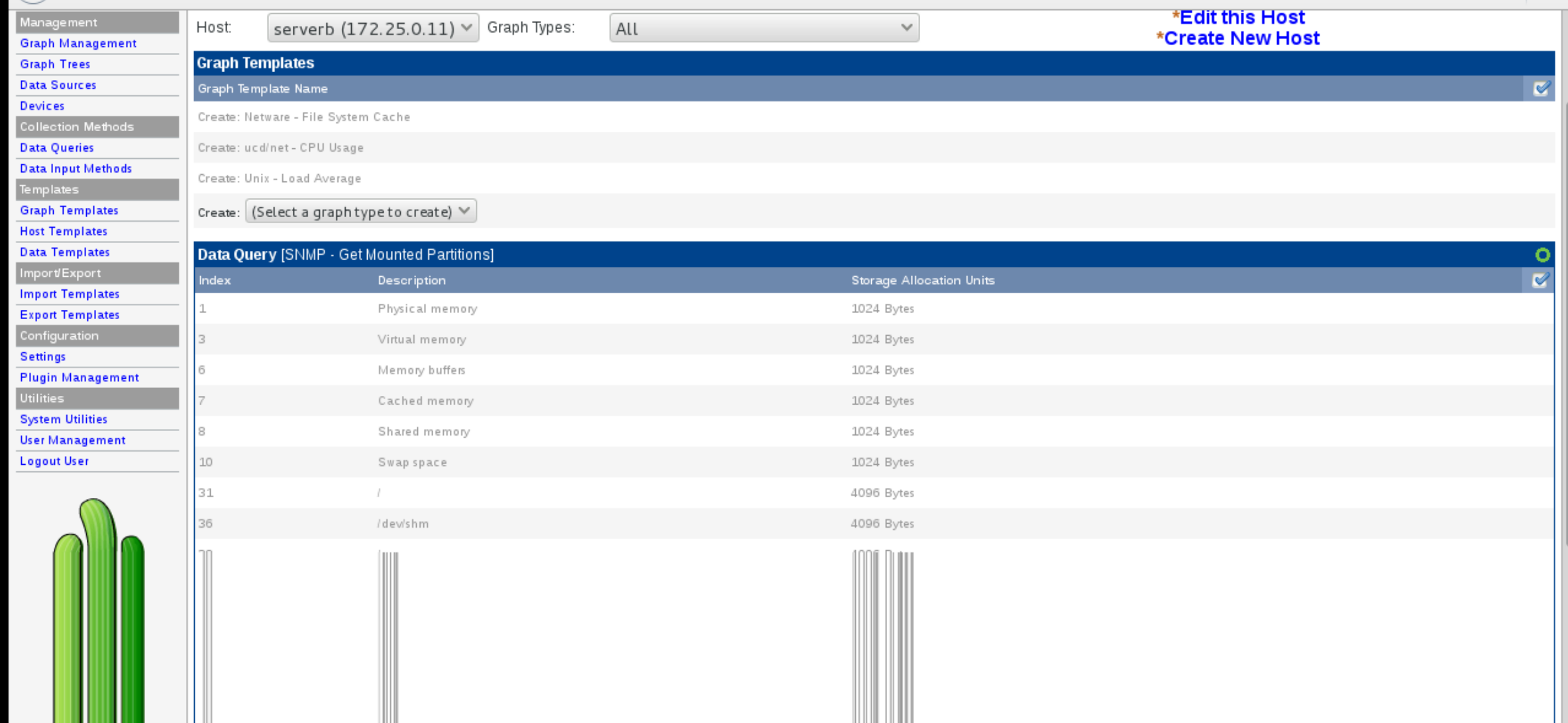
Uptime Goes Backwards

Add

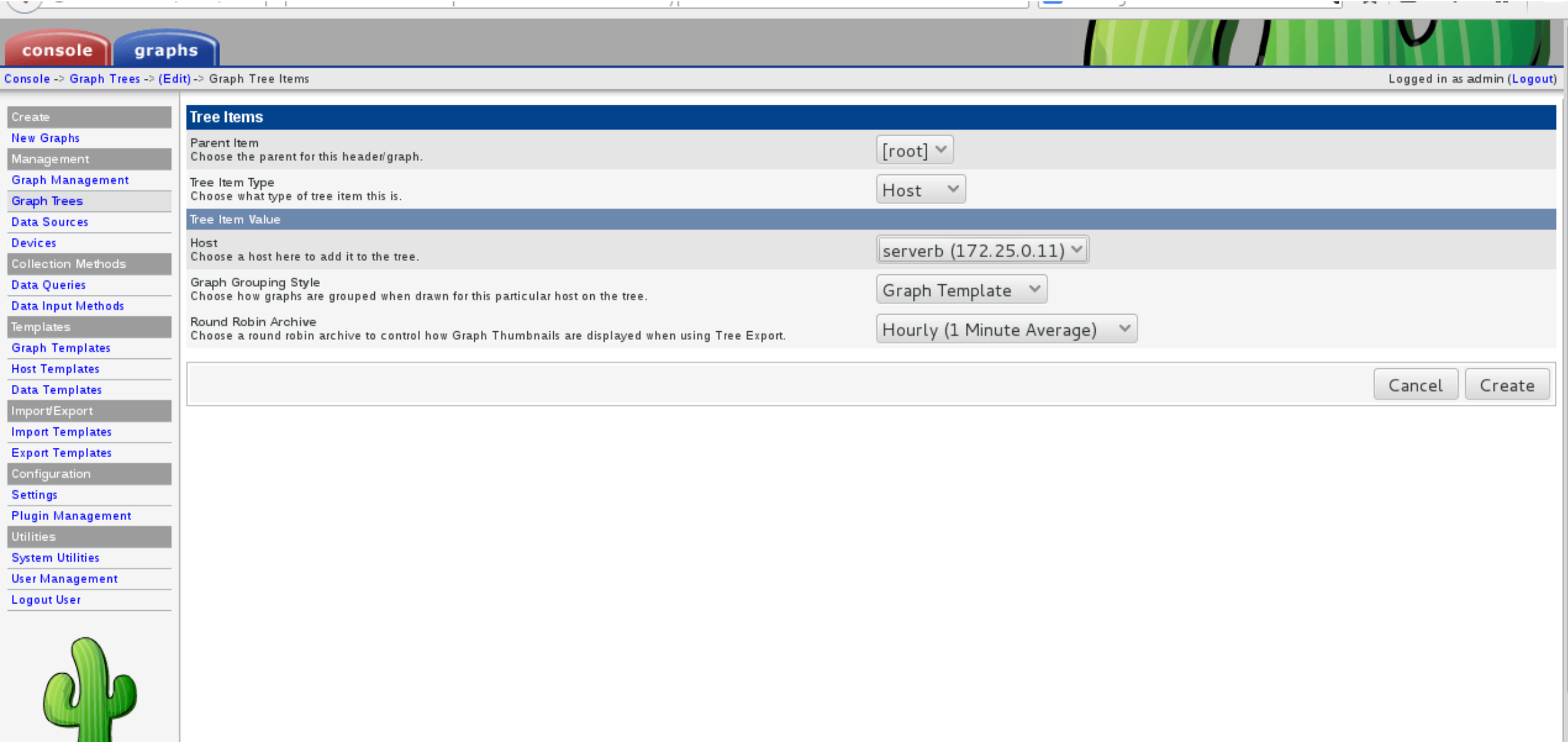
Return

Save

接下来： 点击右上角“Create Graphs for this Host”， 将所有需要出图的数据项打钩



接下来将创建的图形添加到 Cacti 的“ graphs” 标签中去。点击左栏“ Management” 里的” Graph Tree”。然后点击中间位置的“ Default Tree”。在“ Tree Items” 位置点击“ Add”， 并且在“tree item type”里选择“host”， 如下图所示：



点击“ Create” ,等 5 分钟左右就可以看到“ graphs” 标签里有图像生成了。



