

Here are the sites that I used to get here:

<http://www.geekamongus.com/2009/01/31/cacti-on-fedora-10-part-1/>  
<http://cactiusers.org/wiki/PluginArchitectureInstall>  
<http://cactiusers.org/wiki/PluginsInstall>  
<http://docs.cacti.net/plugin:realtime>  
<http://docs.cacti.net/plugin:settings>  
<http://docs.cacti.net/plugin:thold>  
<http://www.eric-a-hall.com/software/cacti-cisco-memory/>

## Server Software Installation

```
yum update
```

```
yum install -y mysql mysql-server httpd mod_ssl php php-snmp php-mysql net-snmp net-snmp-utils rrdtool cacti
```

**Start MySQL and apache, and make sure they start on boot**

```
service mysqld start
service httpd start
service sendmail start
chkconfig httpd on --levels 235
chkconfig mysqld on --levels 235
chkconfig sendmail on --levels 235
```

If you are running SELinux, it is necessary to modify allow the webserver to use sendmail  
setsebool httpd\_can\_sendmail on

## Configuring MySQL, HTTP

```
/usr/bin/mysql_secure_installation
current root password is BLANK
set root password to: SOMEPASSWORD1
remove anonymous users
disallow remote root login
remove test database
reload privilege tables
mysqladmin -u root -p create cacti
mysql -p cacti < /usr/share/doc/cacti-0.8.7e/cacti.sql
mysql -u root -p mysql
GRANT ALL ON cacti.* TO cactiuser@localhost IDENTIFIED BY 'SOMEPASSWORD2';
flush privileges;
exit
```

## Configuring Cacti

```
cp /etc/cacti/db.php /etc/cacti/db.php.orig
vi /etc/cacti/db.php
    $database_password = "SOMEPASSWORD2";
vi /etc/cron.d/cacti
    Remove the # from the beginning of this line so it looks like this:
    */5 * * * * cacti /usr/bin/php /usr/share/cacti/poller.php > /dev/null 2>&1
vi /etc/httpd/conf.d/cacti.conf
#
# Cacti: An rrd based graphing tool
#
Alias /cacti /usr/share/cacti

<Directory /usr/share/cacti/>
    Order Deny,Allow
    Deny from all
    Allow from all
```

</Directory>

## Installing the Plugin Architecture

Find the link for the latest PA version (plugin architecture)

<http://cactiusers.org/downloads/patches/>

```
wget http://mirror.cactiusers.org/downloads/plugins/cacti-plugin-0.8.7e-PA-v2.6.zip
unzip cacti-plugin-0.8.7e-PA-v2.6.zip
cp -r cacti-plugin-arch/files-0.8.7e/* /usr/share/cacti
mysql -p cacti < cacti-plugin-arch/pa.sql
vi /usr/share/cacti/include/global.php
    $database_password = "SOMEPASSWORD2";
    $config['url_path'] = '/cacti/';
```

## Installing the Plugins

<http://docs.cacti.net/plugin:realtime>

```
wget -O realtime-0.4.0-1.tar.gz http://docs.cacti.net/_media/plugin:realtime-0.4.0-1.tar.gz?id=plugin%3Arealtime&cache=cache
```

<http://docs.cacti.net/plugin:settings>

```
wget -O settings-latest.tgz http://docs.cacti.net/_media/plugin:settings-latest.tgz?id=plugin%3Asettings&cache=cache
```

<http://docs.cacti.net/plugin:thold>

```
wget -O thold-latest.tgz http://docs.cacti.net/_media/plugin:thold-latest.tgz?id=plugin%3Athold&cache=cache
cp realtime-0.4.0-1.tar.gz /usr/share/cacti/plugins
cp settings-latest.tgz /usr/share/cacti/plugins
cp thold-latest.tgz /usr/share/cacti/plugins
cd /usr/share/cacti/plugins/
tar -zxvf /usr/share/cacti/plugins/realtime-0.4.0-1.tar.gz
tar -zxvf /usr/share/cacti/plugins/settings-latest.tgz
tar -zxvf /usr/share/cacti/plugins/thold-latest.tgz
ln -s /usr/share/cacti/plugins/settings-0.6 /usr/share/cacti/plugins/settings
ln -s /usr/share/cacti/plugins/thold-0.41 /usr/share/cacti/plugins/thold
chown -R root:root /usr/share/cacti/plugins/*
chmod -R 755 /usr/share/cacti/plugins/realtime
chmod -R 755 /usr/share/cacti/plugins/settings
chmod -R 755 /usr/share/cacti/plugins/thold
mkdir /usr/share/cacti/realtime-rrd
```

If you are running SELinux, it is necessary to modify the settings of realtime (more on this later).

```
chcon -R -t httpd_cache_t /usr/share/cacti/realtime-rrd
```

## Final Cacti Configuration

browse to <http://serverip/cacti>

Next

Select New Install - Next

Finish

Log in as admin/admin

change admin password to: SOMEPASSWORD3

User Management

check the box to allow Plugin Management and Save

Plugin Management

Install and Enable Settings

Install and Enable Realtime

Install and Enable Thresholds

User Management

check the box to allow View Thresholds

check the box to allow Plugin -> Realtime and Save

Settings  
Misc

Set the *Cache Directory* to realtime-rrd

## Creating Device Graphs

Devices

Add a device, and specify IP and SNMP credentials

If SNMP is successful you will see SNMP Information in the top left of the device screen

By default it should have added the SNMP – Interface Statistics to the Associated Data. You can also verify the status of the *SNMP – Interface Statistics* Data Query – it should say “success” and show a bunch of items and rows. If you're really curious, you can click *Verbose Query* to get the raw SNMP data.

Create Graphs for this Host

Under Data Query, select the interfaces you need

Select the appropriate Graph Type

For 10/100 interfaces you can use *In/Out bits with 95<sup>th</sup> Percentile*

For GigE interfaces you can use *In/Out bits (64 bit counters)*

Currently VLAN interfaces don't report statistics properly so don't bother

Click Create

## Managing the Graph Tree

Graph Trees

Click Add

Tree Item Type – Host

Choose the Host that you want added to the tree

## Additional Templates

### **Cisco – CPU Usage Graph Template**

Add the template to your device, and create graphs

Devices

Choose your device

Associated Graph Template

Add *Cisco – CPU Usage*

Save

Create Graphs for this Host

Under Graph Templates, select *Cisco – CPU Usage*

Graph Type can be *In/Out bits with 95<sup>th</sup> Percentile*

Click Create

### **Cisco Router Memory Usage Data Query**

<http://www.eric-a-hall.com/software/cacti-cisco-memory/>

wget <http://www.eric-a-hall.com/software/cacti-cisco-memory/cacti-cisco-memory.0.3.tar.gz>

tar -xzf cacti-cisco-memory.0.3.tar.gz

cd cacti-cisco-memory

cp resource/cisco\_memory.xml /usr/share/cacti/resource/snmp\_queries/

browse to <http://serverip/cacti>

Import Templates

Choose File template/cisco\_memory\_data\_query.xml

Save

Now you just need to add the template to your device, and create graphs

Devices

Choose your device

Associated Data Queries

Add *Cisco Router – Memory Usage*

Save

Create Graphs for this Host

Under the *Memory Pool* Data Query, select all three graphs

Graph Type can be *In/Out bits with 95<sup>th</sup> Percentile*

Click Create