THE BEGINNING

00:00

Exercises

Cacti Installation and Configuration

Exercises

Your Mission...

- Install Cacti
- Create device entry for your local router
- Create device entries for your local servers
- Create entries for class router and switch
- Create graphs for each item
- Place PCs, Routers, Switches in a tree hierarchy of your design.

Installation: Ubuntu Server 14.04

In Ubuntu 14.04, Cacti is at version 0.8.8b, which includes the Cacti Plugin architecture, which is very useful:

```
# apt-get update
# apt-get install cacti cacti-spine
[...]
0 upgraded, 19 newly installed, 0 to remove and 6 not upgraded.
Need to get 11.3 MB of archives.
After this operation, 99.5 MB of additional disk space will be used.
Do you want to continue [Y/n]? Y
```

Installation: Ubuntu Server 14.04

We may have already done this for you. If so, you can use these slides for informational purposes. Skip to the Cacti *Web* installation steps to continue... If NOT proceed accordingly..



Use the workshop root password (bmo15) given in class. Please do not use a different password.



Again, use the workshop root password



Informational message only. Not an issue. Press OK to continue.

Configuring cacti
Please select the webserver type for which cacti should be automatically configured.
Select "None/Others" if you would like to configure your webserver by hand.
Webserver type
Apache2
None /Others
Noney others
l d0k⊳

We are using Apache2. Be sure this is chosen then highlight <OK> and press <ENTER> to continue.

root@host24: /home/sysadm	×
File Edit View Search Terminal Help	
ackage configuration	
Configuring cacti	
The cacti package must have a database installed and configured before it can be used. This can be optionally handled with dbconfig-common. If you are an advanced database administrator and know that you want to perform this configuration manually, or if your database has already been installed and configured, you should refuse this option. Details on what needs to be done should most likely be provided in /usr/share/doc/cacti.	
Otherwise, you should probably choose this option.	
Configure database for cacti with dbconfig-common?	
<yes> <no></no></yes>	

Configuring cacti Please provide the password for the administrative account with which this package should create its MySQL database and user. Password of the database's administrative user:	
kolokokoka	<cancel></cancel>

Use the workshop root password you provided earlier.

MySQL application password for cacti:	n non
<0k> <0	ancel>

Use any password you wish and remember it!! This is *not* the workshop root password.



Repeat the password you just entered in the previous screen.

Now use a web browser and open the following address:

http://hostx.ws.nsrc.org/cacti

You will see the following...

Cacti Installation Guide

Thanks for taking the time to download and install cacti, the complete graphing solution for your network. Before you can start making cool graphs, there are a few pieces of data that cacti needs to know.

Make sure you have read and followed the required steps needed to install cacti before continuing. Install information can be found for <u>Unix</u> and <u>Win32</u>-based operating systems.

Also, if this is an upgrade, be sure to reading the Upgrade information file.

Cacti is licensed under the GNU General Public License, you must agree to its provisions before continuing:

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

Next >>

Press "Next >>"

Cacti Installation Guide		
Please select the type of installation		
New Install		
The following information has been determined from Cacti's configuration file. If it is not correct, please edit 'include/config.php' before continuing.		
Database User: cacti		
Database Hostname:		
Database: cacti		
Server Operating System Type: unix		
	Next >>	

Choose "New Install" and press "Next >>" again.

Cacti Installation Guide

Make sure all of these values are correct before continuing.

[FOUND] RRDTool Binary Path: The path to the rrdtool binary.

/usr/bin/rrdtool

[OK: FILE FOUND]

[FOUND] PHP Binary Path: The path to your PHP binary file (may require a php recompile to get this file).

/usr/bin/php

[OK: FILE FOUND]

[FOUND] snmpwalk Binary Path: The path to your snmpwalk binary.

/usr/bin/snmpwalk

[OK: FILE FOUND]

[FOUND] snmpget Binary Path: The path to your snmpget binary. /usr/bin/snmpget [OK: FILE FOUND]

[FOUND] snmpbulkwalk Binary Path: The path to your snmpbulkwalk binary. /usr/bin/snmpbulkwalk

[OK: FILE FOUND]

[FOUND] snmpgetnext Binary Path: The path to your snmpgetnext binary.

/usr/bin/snmpgetnext [OK: FILE FOUND]

[FOUND] Cacti Log File Path: The path to your Cacti log file.

/var/log/cacti/cacti.log

[OK: FILE FOUND]

SNMP Utility Version: The type of SNMP you have installed. Required if you are using SNMP v2c or don't have embedded SNMP support in PHP.

RRDTool Utility Version: The version of RRDTool that you have installed. RRDTool 1.4.x +

NOTE: Once you click "Finish", all of your settings will be saved and your database will be upgraded if this is an upgrade. You can change any of the settings on this screen at a later time by going to "Cacti Settings" from within Cacti.

Finish

Your screen should look like this. If it does not ask your instructor for help.

Press "Finish"

Cacti: First Time Login



Please enter your Cacti user name and password below:

User Name:	
Password:	

Login

First time login use:

User Name: *admin* Password: *admin*

Cacti: Change Default Password



*** Forced Password Change ***

Please enter a new password for cacti:

Password:	ioioioioioio
Confirm:	NONON

Save

Now you must change the *admin* password.

Please *use the workshop password* provided in class.

Cacti: Fix localhost Graphs - 12.04

There is a minor bug with Cacti version 0.8.8a (only on 12.04) . In order to start generating the default graphs for the Localhost entry (preconfigured at install) you need to do the following:

- 1. After logging in click on the "console" tab.
- 2. Click on "System Utilities" bottom left of the screen.
- 3. Click on "Rebuild Poller Cache"

That's it. Now if you click on the "graphs" tab you will see graphs for your localhost appear within 5 minutes.

console) grap	hs	
Console -> Utilities		
Create	Cacti Sys	tem Utilities
New Graphs	Technical S	Support
Management Graph Management	Technical Support	Cacti technical support page. Used by developers and technical s Cacti. Includes checks for common configuration issues.
Graph Trees	Log Admin	Istration
Data Sources Devices Collection Methods	View Cacti Log File	The Cacti Log File stores statistic, error and other message depe can be used to identify problems with the poller and application
Data Queries Data Input Methods	View User Log	Allows Administrators to browse the user log. Administrators ca
Templates	Poller Cach	e Administration
Graph Templates Host Templates Data Templates	View Poller Cache	This is the data that is being passed to the poller each time it ru executed/interpreted and the results are fed into the rrd files for
Import/Export Import Templates Export	View SNMP Cache	The SNMP cache stores information gathered from SNMP querie to use when gathering information from an SNMP-enabled host
Configuration Settings	Rebuild Poller Cache	The poller cache will be cleared and re-generated if you select th can get out of sync with the cache in which case it makes sense
Plugin Management Utilities System Utilities		

Configuring cacti

To monitor any devices, you must install SNMP.

Configuring cacti

- Create device entry for your virtual hosts i.e host 1
 ..host N.
- Create device entry for your classroom router
- Create graphs for each item
- Place PCs, Routers, Switches in a tree hierarchy of your design.
- Add as many devices from other groups as you wish.
- (Optional: add additional devices using the command line scripts.)

Have Fun !!

