

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 Hosts, Routers, Switches in a tree hierarchy of your design.

Use the Network Diagram on the class wiki as a reference.

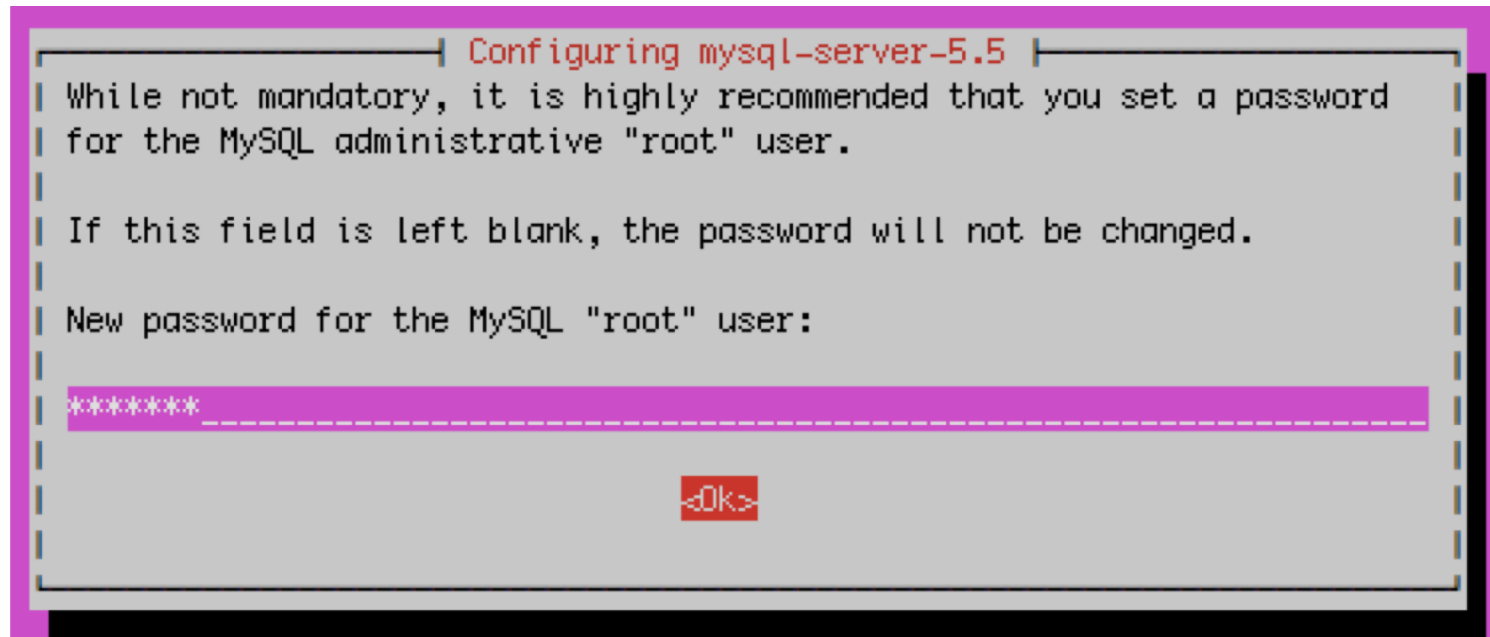
Installation: Ubuntu Server 16.04

In Ubuntu 16.04, Cacti is at version 0.8.8f, which includes the Cacti Plugin architecture, which is very useful:

```
# apt-get update
# apt-get install cacti
[...]  
6 upgraded, 26 newly installed, 0 to remove and 26 not upgraded.Need to get  
26.7 MB of archives.After this operation, 176 MB of additional disk space  
will be used.Do you want to continue? [Y/n] y
```

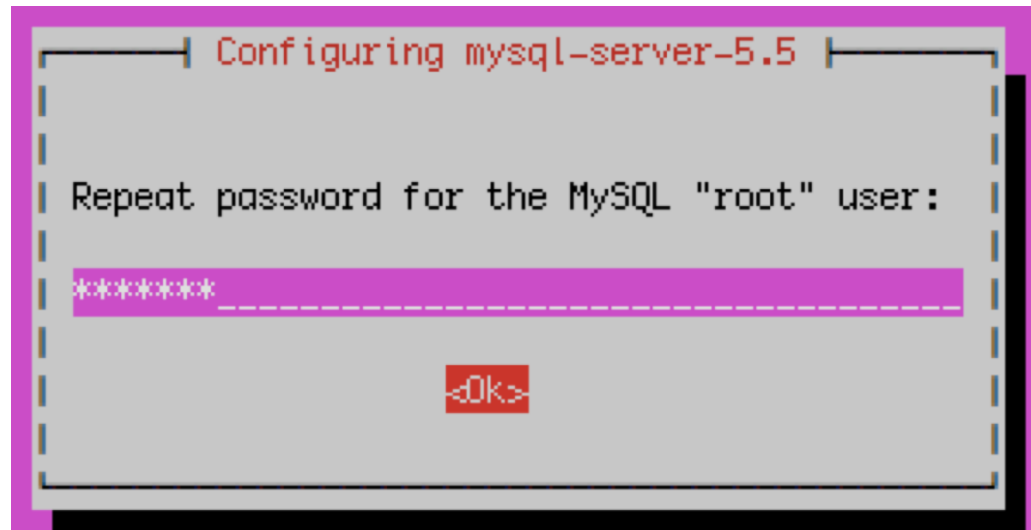
Installation: 2

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...



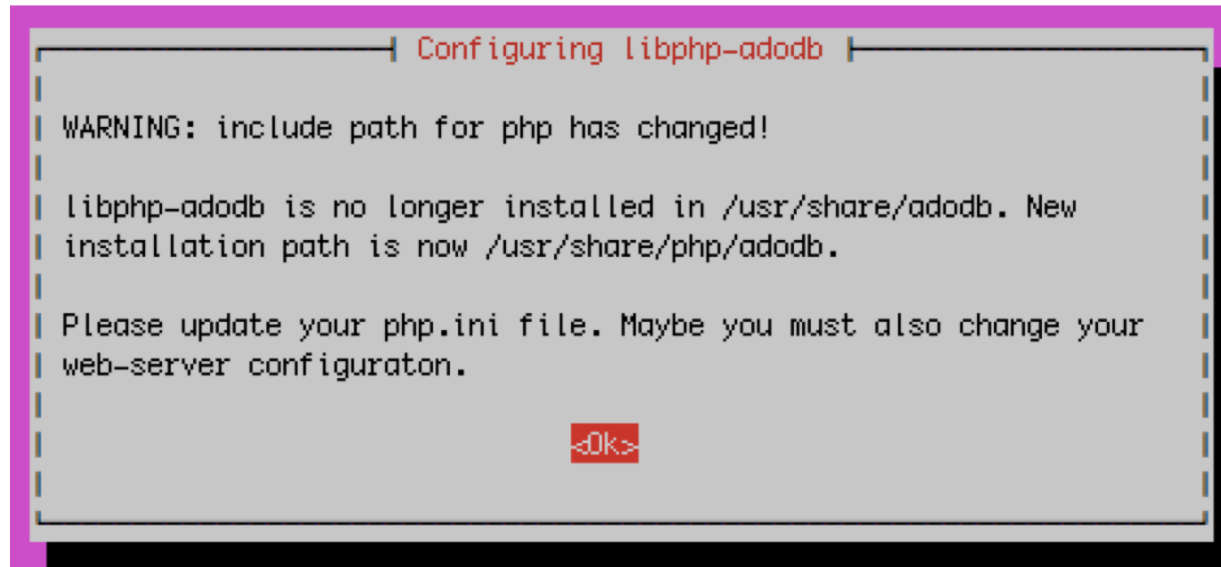
***Use the **workshop password** given in class.
Please do not use a different password.***

Installation: 3



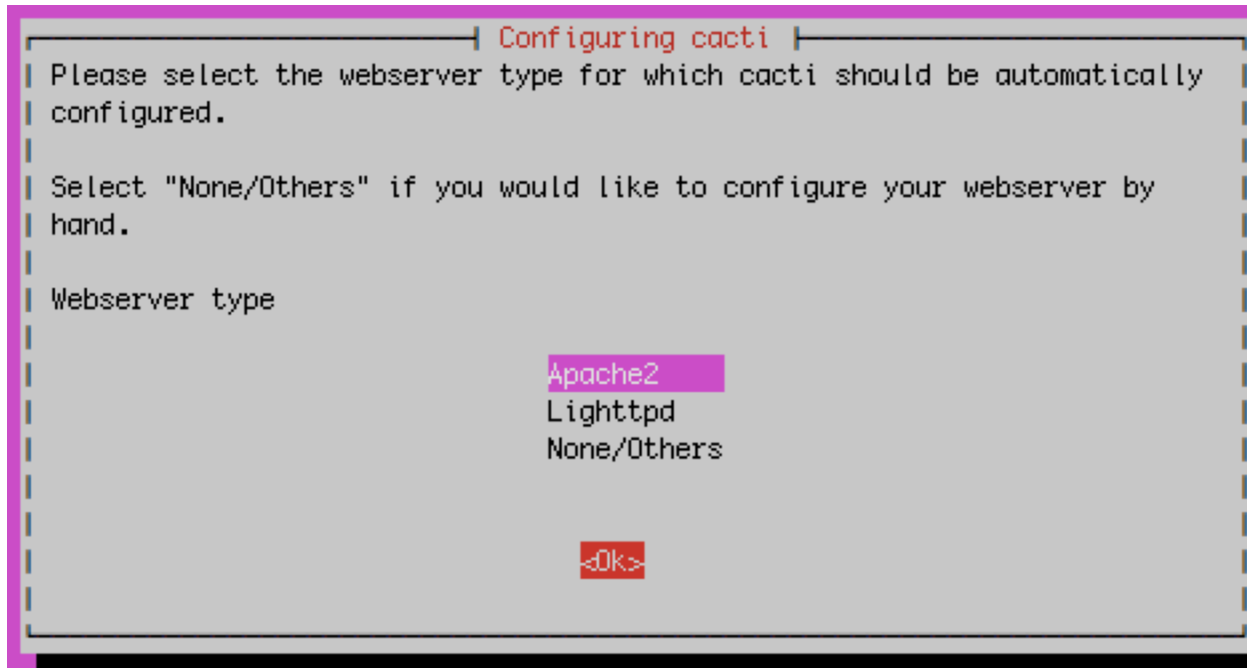
Again, use the workshop password

Installation: 4



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

Installation: 5



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

Installation: 6

```
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.

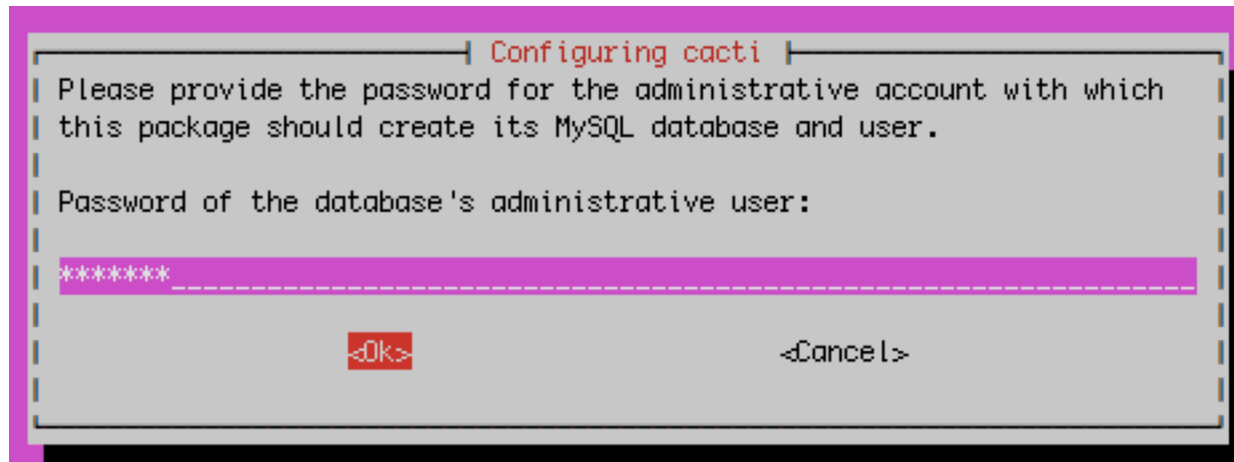
Otherwise, you should probably choose this option.

Configure database for cacti with dbconfig-common?

<Yes>                                <No>
```

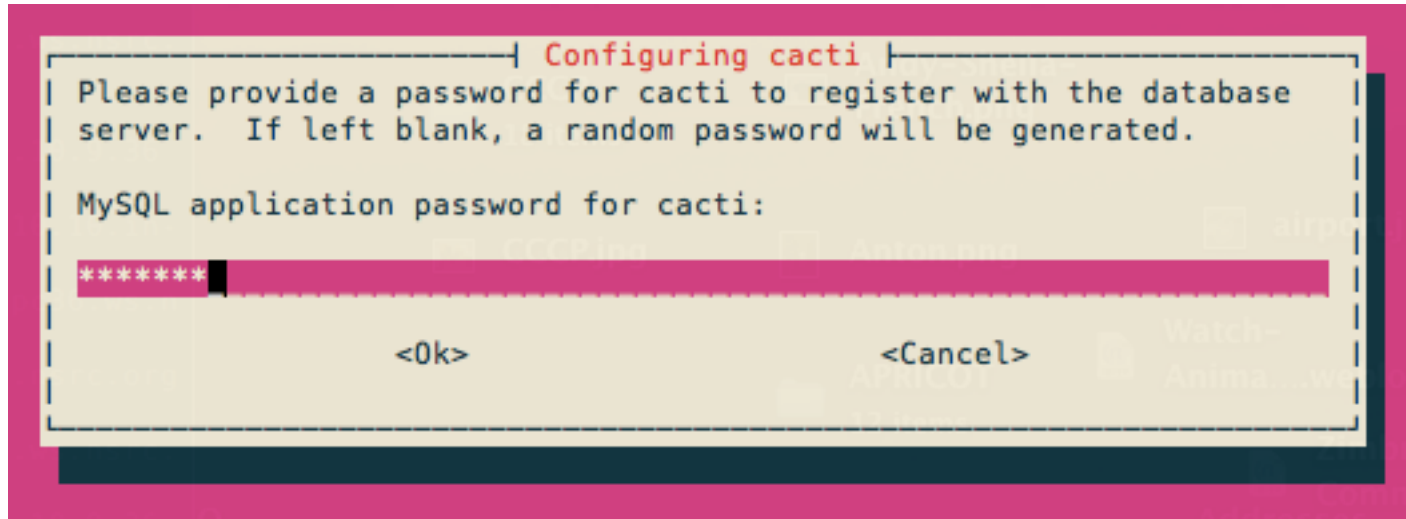
Choose <Yes> and press <ENTER> to continue.

Installation: 7



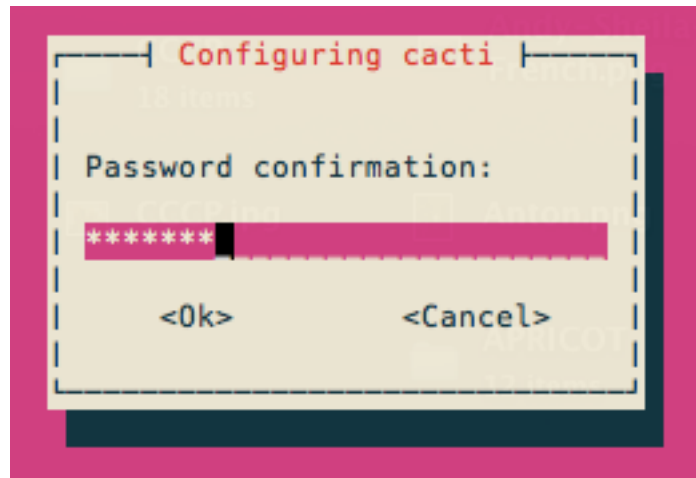
Use the **workshop password** you provided earlier.

Installation: 8



Use any password you wish.
This is ***not*** the workshop password.

Installation: 9



Repeat the password you just entered in the previous screen.

Cacti: Installation - Web

Now use a web browser and open the following address:

<http://hostX.campusY.ws.nsrc.org/cacti>

You will see the following...

Cacti: Installation - Web

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 [Unix](#) and [Win32](#)-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:

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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 - Web

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: localhost
Database: cacti
Server Operating System Type: unix

Next

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

Cacti: Installation - Web

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.

NET-SNMP 5.x

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

RRDTool 1.4.x

Critical! Be sure you select 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



User 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



User Login

*** Forced Password Change ***

Please enter a new password for cacti:

Password:

Confirm:

Save

Now you must change the *admin* password.

Please ***use the workshop password*** provided in class.

Configuring cacti

- Create device entry for your local router
- Create device entries for your local servers
- Create device entry for your classroom router
- Create device entry for your classroom switch
- 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.)
- Use the Network Diagram on the class wiki as a reference.