

Steps to migrate a Windows Cacti install to Linux

Conduct the following steps after hours or during scheduled downtime, as there will be gaps in your graphs. I have taken the appropriate precautions to minimize the overall downtime. These instructions assume you have created a base Linux installation using the instructions posted at <http://docs.cacti.net>

1. Stop all active Cacti processes on the servers. ****** Beginning of graph gaps ******
 - a. Disable the poller (Windows: Disable Scheduled Tasks, Linux: Comment Cron)
 - b. Turn off any other processes which may be customized.
2. Establish a means of transferring all XML files. In this example, I will use standard FTP.
 - a. Download FileZilla. At the time of writing this document, it is located at:
http://sourceforge.net/project/showfiles.php?group_id=21558&package_id=21737
 - b. Install FileZilla Server accepting all default settings.
 - c. Create a user, with permissions, for the transfer of rrd files.
In this example, I will use the following credentials:
 - Username: rrd
 - Password: rrd
 - d. Using FileZilla, Click Edit -> Users.
 - Click "Add".
 - Type the name of the user, for example "rrd". Click "OK".**All type directives assume the exclusion of quotes (" ") from this point forward, unless specified.**
 - Click "Password".
 - Type a password for the rrd user, for example "rrd".
 - Click "Shared Folders", select the new user then click "Add" under "Shared Folders".
 - Select the folder on the Windows Server which contains the XML files.
 - Choose the appropriate permissions the user should have to this folder.

I chose all options, since this will only be a temporary user. Use a strong password if you are using this on a production server.

 - Click "OK".
3. Convert the existing Windows rrd files to XML. Due to the high number of rrd's in my deployment, I will be using a batch script.
 - a. Create a blank file, and input the following text, substituting the path:
`FOR /R E:\your\path\to\cacti\rra %%f IN (*.*) DO rrdtool dump %%f > %%f.xml`
 - b. Save the file as rrdconvert.bat
 - c. Execute the batch file. Be sure you have enough free space on the partition, otherwise you may have to pause/re-initiate the script once and a while, moving the XML files somewhere else to free up some space. Use the pause/enter keys to accomplish pausing and re-initiating the script.
4. Transfer the XML files to the Linux server.
 - a. Create a temporary folder on the Linux server for the XML files.
The command to create a folder is "`mkdir foldername`". Substitute the folder name.
 - b. Change the current directory to the rrd folder. Type "`cd /home/youruser/rrd`", for example.
 - c. Open an FTP session to the Windows server.
 - d. Type "`binary`", then hit Enter.
 - e. Type "`prompt`" to turn interactive mode off.
 - f. Type "`user`", enter the username. Type "`password`", enter the password.
 - g. Type "`mget *.xml`". This will initiate the transfer of all XML files within the rra folder.

Be patient, depending on the number of XML's and the speed of your network, this could take a while. Keep in mind the amount of time the transfer takes will directly impact gaps in your graphs. Using a gigabit network, you should be able to transfer approximately 5000 XML's in less than 30 minutes.

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5. Convert the transferred XML files to Linux rrd format.
 - a. Create a script, called rrdimport, which will import the transferred rrd's.
 - Type "vim rrdimport". Type "i" to enter insert mode.
 - Enter the following code into the empty file, **do not remove the quotes**:


```
#!/bin/bash
#Import XML to Linux formatted rrd
#Please update the paths accordingly
cactipath='/var/www/html/cacti/rra'
temprra='/home/someuser/rra'
files=$(ls $mounted | grep .xml | cut -d "." -f 1 )
for i in $files; do
rrdtool restore "$temprra/$i.rrd.xml" "$cactipath/$i.rrd"
echo "$i.xml restored to $cactipath/$i.rrd."
done
```
 - Exit insert mode by hitting the escape key. Save the file by typing ":wq!"
 - b. Change the permissions of script, so it can be executed.
 - Type "chmod +x rrdimport"
 - c. Execute the script by typing "./rrdimport"
6. Dump the MySQL database from the Windows server.
 - a. From a command prompt, type the following, substituting MMDDYY with the current date:


```
"mysqldump -u root -p cacti > cactidumpMMDDYY.sql"
```
 - b. Move this file to the rra folder on the windows server, and then transfer it to the Linux server.
 - Transfer the file using FTP; connect to the server and type "send cactidumpMMDDYY.sql".
 - Use the instructions in step 4 to connect.
7. Import the MySQL database to the Linux server
 - a. From a shell, type the following:


```
"mysql cacti < cactidumpMMDDYY.sql"
```
8. Verify the permissions of all rrd's within the Linux rra/ folder.
 - a. Example:

```
chown -R cacti:users rra/
```
9. Adjust the cacti paths on the Linux server.
 - a. Log in to the migrated cacti install, using the credentials of the previous windows install.
 - b. Click "Settings" -> "Paths". These paths vary, mine are:
 - snmpwalk – RRDTool - /usr/bin/<binary name>
 - PHP Binary Path /usr/bin/php
 - Cacti Log File Path: /var/www/html/cacti/log/cacti.log
 - Cactid Poller File Path: /usr/local/cactid/cactid
10. Rebuild the poller cache on the Linux server.
 - a. Click "System Utilities" -> "Rebuild Poller Cache".
11. Uncomment the cron job. Have fun, the cacti installation is now migrated!

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