

DVD-based repository

I use Windows computers every day, I run my home stuff on a Mac and I want to continue to develop my Linux skills - so, I decided to build a Linux server at home. Out came my Red Hat Enterprise Linux 5 installation DVD and a short while later I had a working server. Great. Next, I wanted to customise the installed packages (the installer had given me the option to customise later, which I had accepted) - I fired up the Package Manager and...

...that's right, a big empty white space in the browse list - the only listed packages were those that had been installed at setup time.

It seems that `yum/pirut` cannot read the RHEL installation DVD. After some googling, I decided to set up a new repository and created a file in `/etc/yum.repos.d` called `rhel-dvd.repo`, the contents of which were:

```
[dvd]
mediaid=1170972069.396645
name=DVD for RHEL5
baseurl=file:///media/RHEL_5%20i386%20DVD
enabled=1
gpgcheck=0
```

(the `mediaid=1170972069.396645` line is the first line from the `.discinfo` file on the RHEL DVD, based on a comment on Jeremy Katz's site.)



It seemed to recognise my DVD as an installation source but not as a valid repository, so after digging a little deeper I found that `mediaid=` requires `yum` 3.1.2 or later and I ended up in dependency hell (exactly what `rpm` is supposed to avoid).

This is crazy - it seems that Red Hat expect me to install everything from the Red Hat Network (RHN) - what about servers that do not have a connection to the Internet (or to an RHN proxy/satellite server)? Surely installation from the RHEL DVD should be an option (I suppose it is, technically, if I know what every RPM is for - that's where the `pirut` browse capability is so useful).

For once, I give in. I could spend hours on this issue (I've already spent a few too many) but it's Friday evening now and my bad IT

day has turned into a bad IT week. I need to put the kids to bed and then have a quiet evening in with a large glass (or two) of wine.

In the meantime, if anyone has any ideas on how to get `yum/pirut` to recognise a CD/DVD as valid installation media, please leave a comment.

Posted: 17:48 on Friday 13 July 2007 under Linux.

Possibly related?

- Running Red Hat Enterprise Linux without a subscription
- Passed the Red Hat Certified Technician exam
- Installing VMware Server on Red Hat Enterprise Linux 5
- Configuring wireless Ethernet with Red Hat Enterprise Linux 5
- Some more about virtualisation with Xen (including installation on RHEL5)
- BT Openzone may not work with Linux-based Intel Centrino systems
- The Microsoft-Novell alliance - good, bad or ugly?
- Adding policy pages to McAfee ePolicy Orchestrator
- Problems copying files from a backup... restored by thinking laterally
- Refreshing the CD-ROM drive in Virtual Server

Comments

Pingback from Fedora 7 package-less without the Internet? « TheWheat Field**Time:** Tuesday 17 July 2007, 2:35

1

[...] this post that enabled me to update via the GUI installer, pirut, but not via the command line yum. Being [...]

Comment from Jeff B**Time:** Sunday 2 September 2007, 3:23

2

Your info above was a great help to me in getting my repository loaded. the only thing different that I did was on the BASEURL entry, I added the full path into the /Server directory, so mine (on Oracle Enterprise Linux 5) was:

```
baseurl=file:///media/Enterprise%20Linux%20cd%201%2020070613/Server
```

The /Server directory on my CD is where the "reodata" directory is located. Once I added that path, everything you have above worked great. Thanks!

Comment from Mark Wilson**Time:** Tuesday 4 September 2007, 1:06

3

Jeff, thank you so much for leaving that comment - your suggestion of adding /Server to the base URL fixed the problem completely 😊

For reference, the file contents of /etc/yum.repos.d/rhel-dvd.repo are now:

```
[dvd]
mediaid=1170972069.396645
name=DVD for RHEL5
baseurl=file:///media/RHEL_5%20i386%20DVD/Server
enabled=1
gpgcheck=0
```

Mark

Comment from Mark Wilson**Time:** Thursday 4 October 2007, 9:22

4

(and the disc has to be mounted... insertion in the drive is not enough!!!)

Comment from Matthew Steele**Time:** Wednesday 31 October 2007, 19:05

5

First of all, thanks for this thread, it's helped me make progress of my own. I am able to see the packages on the DVD in the tool. However, when I try to install any of them, I get an error:

```
IOError:
```

This appears to be coming from the repomd.xml file, which defines package locations as 'media:/// ' etc.

Did you not see this problem?

Comment from Mark Wilson**Time:** Wednesday 31 October 2007, 23:55

6

Hi Matthew,

Do you mean something like this:

```
yum search packagename
Loading "installonlyn" plugin
Loading "rhnpplugin" plugin
This system is not registered with RHN.
RHN support will be disabled.
Setting up repositories
file:///media/RHEL_5%20i386%20DVD/Server/repodata/repomd.xml: [Errno 5] OSError: [Errno 2] No such file or directory: '/media/RHEL_5 i386
DVD/Server/repodata/repomd.xml'
Trying other mirror.
Error: Cannot open/read repomd.xml file for repository: dvd
```

If so, this is what I get if I don't have the DVD mounted, although I don't recall having seen a reference to "IOError:".

Comment from Matthew Steele**Time:** Thursday 1 November 2007, 19:00

7

Mark,

Thanks for your response. Ok, here is my rhel-dvd.repo file:

```
[dvd]
mediaid=1170972087.594754
name=DVD for RHEL5
baseurl=file:///media/cdrom/Workstation
enabled=1
```

```
gpgcheck=0
```

Note that I could not get it to see the structure without the /media/cdrom reference (that is the mount point for my DVD). The output when I try to install an RPM is:

Component: Software Manager

Summary: TBe634e670 __init__.py:767:downloadHeader:RepoError: failed to retrieve system-config-kickstart-2.6.19.1-1.el5.noarch.rpm from dvd error was [Errno 4] IOError: urlopen error unknown url type: media>

Traceback (most recent call last):

File "/usr/sbin/pirut", line 334, in _apply

self.applyChanges(self.mainwin)

File "/usr/lib/python2.4/site-packages/pirut/__init__.py", line 557, in applyChanges

self.checkDeps(mainwin)

File "/usr/lib/python2.4/site-packages/pirut/__init__.py", line 322, in checkDeps

self.populateTs(keepold=0)

File "/usr/lib/python2.4/site-packages/yum/depolve.py", line 153, in populateTs

self.downloadHeader(txmbr.po)

File "/usr/lib/python2.4/site-packages/yum/__init__.py", line 767, in downloadHeader

raise Errors.RepoError, saved_repo_error

RepoError: failed to retrieve system-config-kickstart-2.6.19.1-1.el5.noarch.rpm from dvd

error was [Errno 4] IOError:

Local variables in innermost frame:

errors: {}

e: [Errno 2] No such file or directory: '/var/cache/yum/dvd/headers/system-config-kickstart-2.6.19.1-1.el5.noarch.hdr'

self:

saved_repo_error: failed to retrieve system-config-kickstart-2.6.19.1-1.el5.noarch.rpm from dvd

error was [Errno 4] IOError:

repo: dvd

checkfunc: (>, (, 1), {})

local: /var/cache/yum/dvd/headers/system-config-kickstart-2.6.19.1-1.el5.noarch.hdr

po: system-config-kickstart - 2.6.19.1-1.el5.noarch

Comment from Mark Wilson

Time: Thursday 1 November 2007, 21:07

8

Sorry Matthew, that's got me stumped (although with my limited Linux knowledge that doesn't take too much).

The only thing that I can see different is that I've let RHEL automount the DVD for me when I double-clicked its icon in Nautilus (so `mount` shows `/dev/hdc on /media/RHEL_5 i386 DVD type iso9660 (ro,noexec,nosuid,nodev,uid=0)` whereas you have manually mounted it on `/media/cdrom`).

HTH, Mark

Comment from Matthew Steele

Time: Friday 2 November 2007, 19:19

9

Mark, thanks for your response anyway. I will continue investigating and let you know if I find anything further.

-Matthew Steele

Comment from Massimo Corbani

Time: Thursday 8 November 2007, 15:36

10

Hi everybody,

I think you have to use the `createrepo` command in order to create a new RPM repository.

Check man pages of the command and good luck!!

Massimo

Comment from Andrew James

Time: Thursday 15 November 2007, 14:59

11

There's a Redhat kb article about this:

Installing packages from an RHEL 5 iso.

You do first have to install the `createrepo` rpm, which is on the disk (I installed that by double clicking on the package), but after that it went smoothly.

Hope that helps...

Andy

Comment from David Xiao

Time: Thursday 22 November 2007, 8:02

12

my repo file is:

```
[dvd]
```

```
name=rhel5dvd
```

```
baseurl=file:///dvd/actual/Server#actual is a mount point.
```

```
enabled=1
```

```
gpgcheck=1
```

```
gpgkey=...
when i use yum install/erase packages,it's ok,but when through pirut/system-config-packages,it got output as below,but if i mkdir headers in /var/cache/yum/dvd,it's ok
too.could anybody give some deeper idea?
Component: Software Manager
Summary: TB5c703576 __init__.py:870:downloadHeader:RepoError: failure: actual/Server/adaptx-0.9.13-3jpp.1.i386.rpm from dvd: [Errno 256] No more mirrors to try.

Traceback (most recent call last):
File "/usr/sbin/system-config-packages", line 334, in _apply
self.applyChanges(self.mainwin)
File "/usr/lib/python2.4/site-packages/pirut/__init__.py", line 557, in applyChanges
self.checkDeps(mainwin)
File "/usr/lib/python2.4/site-packages/pirut/__init__.py", line 322, in checkDeps
self.populateTs(keepold=0)
File "/usr/lib/python2.4/site-packages/yum/depolve.py", line 201, in populateTs
self.downloadHeader(txmbr.po)
File "/usr/lib/python2.4/site-packages/yum/__init__.py", line 870, in downloadHeader
raise Errors.RepoError, saved_repo_error
RepoError: failure: actual/Server/adaptx-0.9.13-3jpp.1.i386.rpm from dvd: [Errno 256] No more mirrors to try.

Local variables in innermost frame:
errors: {}
e: [Errno 2] No such file or directory: '/var/cache/yum/dvd/headers/adaptx-0.9.13-3jpp.1.i386.hdr'
self:
saved_repo_error: failure: actual/Server/adaptx-0.9.13-3jpp.1.i386.rpm from dvd: [Errno 256] No more mirrors to try.
repo: dvd
checkfunc: (>, (, 1), {})
local: //var/cache/yum/dvd/headers/adaptx-0.9.13-3jpp.1.i386.hdr
po: adaptx - 0.9.13-3jpp.1.i386
```

Comment from John Willis**Time:** Sunday 2 December 2007, 6:36

13

From what I can tell there is no fix for the problem.

The workaround is in the Red Hat KB which basically says rebuild your repodata to conform to yum "standard" without the media id bits.

Then Pirut will work.

From reading around it seems Jeremy Katz and others were trying to use the media id tag to "cache" repodata from the first disc and allow swapping of media without having to re-read the repodata from each disc. That project looks premature for RHEL5 and may involve upstream changes to yum to "allow" the media id tags. Since the Anaconda installer serves the install process and its using yum as the resolver for install they hacked it to support media id tags to make installs smoother. "After" install though yum standard can't deal with the repodata "accessories" like media id tags in the repodata, so it throws an "unknown url type".

Installing createrepo lets you rebuild the repodata, but it needs to be relative to package source so the package source has to be on read/write media.

I "guess" if they got the changes into an "upstream" version of yum then someday a yum errata or update will include a version that doesn't choke on the old repodata and we could use DVD repodata, but that's just speculation on my part.



This work is licensed under a
Creative Commons Attribution-NonCommercial-Share Alike 2.0 UK: England & Wales License