

## bugreport: backup doesn't accept symlinks

12-15 minutes

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**Oleg Artemiev**

unread,

Jan 28, 2015, 12:46:32 AM 1/28/15

to qubes...@googlegroups.com

Hello.

I've made a storage split for hdd/ssd storage - appvms private.img were moved to hdd and simlink is placed in each appvm folder.

When private.img has been moved to some other place and the simlink is created there the VM is running OK, but the backup shows wrong size for VM with such an image - 4.0Kib instead of real size of private.img

.

Also after selecting such a VM in a backup the backup finally fails to run showing no output in its window.

Additional technical information:

pwd

/var/lib/qubes/appvms/myvmname

ls myvmname

total 111940

drwxrwxr-x 2 myuid myuid 4096 Jan 28 01:44 apps

drwxrwxr-x 2 myuid myuid 4096 Jan 28 01:44 apps.icons

lrwxrwxrwx 1 myuid myuid 54 Nov 1 23:54 icon.png ->

/usr/share/icons/hicolor/128x128/devices/appvm-red.png

-rw-rw-r-- 1 myuid myuid 918 Nov 1 23:58 myvmname.conf

lrwxrwxrwx 1 root root 61 Jan 28 03:26 private.img ->

/mypath/mypath2/myvmname/private.img

-rw-rw-r-- 1 myuid myuid 11811160064 Nov 2 00:11 volatile.img

-rw-rw-r-- 1 myuid myuid 56 Nov 1 23:54 whitelisted-appmenus.list

ls -ld /mypath/

drwxr-xr-x. 23 myuid myuid 4096 Jan 28 00:34 /mypath/

ls -ld /mypath/mypath2/

drwxr-xr-x 10 myuid myuid 4096 Jan 28 03:25 /mypath/mypath2/

ls -ld /mypath/mypath2/myvmname/

drwxr-xr-x 2 root root 4096 Jan 28 03:26 /mypath/mypath2/myvmname/

ls -ld /mypath/mypath2/myvmname/private.img

-rw-rw---- 1 myuid myuid [2147483648](#) Nov 2 00:11

/mypath/mypath2/myvmname/private.img

--

Bye.Olli.

gpg --search-keys grey\_olli

Key fingerprint = 9901 6808 768C 8B89 544C 9BE0 49F9 5A46 2B98 147E

Blog keys (mostly in russian): <http://grey-olli.livejournal.com/tag/>

## Axon

unread,

Jan 28, 2015, 5:53:11 AM 1/28/15

to Oleg Artemiev, qubes...@googlegroups.com

-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA512

I'm not sure if this helps at all, but I have several AppVMs where I've moved the entire VM directory (not just private.img) to a secondary drive and created a symlink back to /var/lib/qubes/appvms. I haven't noticed any of the backup problems you mention with respect to these AppVMs.

-----BEGIN PGP SIGNATURE-----

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6GUlpgllwWaWQgdFRBWqBnqyLI98yrazW4GP1p7KVr9OqLzy3VLGX2fyGIJ/LuTD  
+cGcXCm3BCgqgpO0ashl4cYjc931qZBlc0TI20xdNYngEFpA0o9dxCHNiiqL2978  
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ZEAV/MM7STtLpO/X8RMa/D/D/qN00KwtjHUPwT9iMCO+69Zsn/XBBOQo6XKWtFFV  
zW42tZCygHVplndySt6Oqu3+FWZDwREzYQsnoTDTL8UQIfEKYFE7y9DvO9bukVzQ  
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XyLhLn/a+NC3pVi8ddwH/mitXW+OBZ9zJ9RX0cwgsCD9LYcECC4VulgyGGWpEI69  
o2IPcQKzo60//Mfu/awtQTS6meWqhuTk13LKxsl83TBCdVo6To6sTqk2W/88Ew77  
kESBvuV29omFJuORgqa+  
=ive+

-----END PGP SIGNATURE-----

## Oleg Artemiev

unread,

Jan 28, 2015, 6:33:30 PM 1/28/15

to Axon, qubes...@googlegroups.com

>> I've made a storage split for hdd/ssd storage - appvms private.img  
>> were moved to hdd and simlink is placed in each appvm folder.  
>>  
>>  
>> When private.img has been moved to some other place and the simlink  
>> is created there the VM is running OK, but the backup shows wrong  
>> size for VM with such an image - 4.0Kib instead of real size of  
>> private.img .  
>>  
>>

>> Also after selecting such a VM in a backup the backup finally fails  
>> to run showing no output in its window.  
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[]

> I'm not sure if this helps at all, but I have several AppVMs where  
> I've moved the entire VM directory (not just private.img) to a  
> secondary drive and created a symlink back to /var/lib/qubes/appvms. I  
> haven't noticed any of the backup problems you mention with respect to  
> these AppVMs.

thank you for information, but I need main image be on ssd and private  
image be on hdd -  
just to make ssd live longer. If I move the dir - both will get the same place.

## Marek Marczykowski-Górecki

unread,

Jan 28, 2015, 6:40:04 PM 1/28/15

to Oleg Artemiev, Axon, qubes...@googlegroups.com

On Wed, Jan 28, 2015 at 10:33:28PM +0400, Oleg Artemiev wrote:

> >> I've made a storage split for hdd/ssd storage - appvms private.img  
> >> were moved to hdd and symlink is placed in each appvm folder.

> >>

> >>

> >> When private.img has been moved to some other place and the symlink  
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> >> private.img .

> >>

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> >>

> []

>

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> > these AppVMs.

> thank you for information, but I need main image be on ssd and private  
> image be on hdd -

> just to make ssd live longer. If I move the dir - both will get the same place.

What do you mean by "main image"? VM root filesystem is from template,  
so you can simply keep templates on your SSD. Unless you are using  
standalone VMs (not based on any template) - then indeed such VMs have  
both root.img and private.img in the same directory.

--

Best Regards,  
Marek Marczykowski-Górecki  
Invisible Things Lab

A: Because it messes up the order in which people normally read text.

Q: Why is top-posting such a bad thing?

**cprise**

unread,

Jan 28, 2015, 10:29:39 PM 1/28/15

to Oleg Artemiev, Axon, qubes...@googlegroups.com

On 01/28/15 13:33, Oleg Artemiev wrote:

I've made a storage split for hdd/ssd storage -  
appvms private.img  
were moved to hdd and symlink is placed in each  
appvm folder.

When private.img has been moved to some other  
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private.img .

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I've moved the entire VM directory (not just private.img)  
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qubes/appvms. I  
haven't noticed any of the backup problems you mention  
with respect to  
these AppVMs.

thank you for information, but I need main image be on ssd and  
private  
image be on hdd -  
just to make ssd live longer. If I move the dir - both will get  
the same place.

FWIW, SSDs no longer appear to have some of the reliability quirks they had circa 2009. The units made today can even outlast HDs.

## Oleg Artemiev

unread,

Jan 29, 2015, 10:30:51 PM 1/29/15

to Marek Marczykowski-Górecki, Axon, qubes...@googlegroups.com

On Wed, Jan 28, 2015 at 9:39 PM, Marek Marczykowski-Górecki

<[marm...@invisiblethingslab.com](mailto:marm...@invisiblethingslab.com)> wrote:

> On Wed, Jan 28, 2015 at 10:33:28PM +0400, Oleg Artemiev wrote:

>> >> I've made a storage split for hdd/ssd storage - appvms private.img

>> >> were moved to hdd and simlink is placed in each appvm folder.

>> >>

>> >>

>> >> When private.img has been moved to some other place and the simlink

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>>

>> > I'm not sure if this helps at all, but I have several AppVMs where

>> > I've moved the entire VM directory (not just private.img) to a

>> > secondary drive and created a symlink back to /var/lib/qubes/appvms. I

>> > haven't noticed any of the backup problems you mention with respect to

>> > these AppVMs.

see below about most possible cause of problem - symlink was owned by root.

>> thank you for information, but I need main image be on ssd and private

>> image be on hdd -

>> just to make ssd live longer. If I move the dir - both will get the same place.

In the appvm directory there're also some stuff that's rewritten rarely:

apps/\* apps.icons/\* \*.xml \*.png \*.list

I'd prefer these to stay on ssd. Moving only volatile.img and private.img .

> What do you mean by "main image"? VM root filesystem is from template,

> so you can simply keep templates on your SSD. Unless you are using

> standalone VMs (not based on any template) - then indeed such VMs have

> both root.img and private.img in the same directory.

Thanks for reminding. I meant standalone VMs at the same time wrongly talking about AppVMs.

As about bugreport:

clarification: the backuping fails only when symlinks has been made by root.

If the symlink is owned by the user that owns the image - image size to backup is still displayed incorrectly as size of symlink, but backup works okay.

## **Marek Marczykowski-Górecki**

unread,

Jan 29, 2015, 11:12:24 PM1/29/15

to Oleg Artemiev, Axon, qubes...@googlegroups.com

And the backup contains only a \*symlink\*, not the actual file... So for now you need to backup your HDD manually. Perhaps we will solve this problem in the future, but simply following the symlinks isn't the best option, because we need to properly backup symlinks in some places (at least icon.png).

## **Axon**

unread,

Jan 30, 2015, 7:26:51 PM1/30/15

to Marek Marczykowski-Górecki, Oleg Artemiev, qubes...@googlegroups.com

-----BEGIN PGP SIGNED MESSAGE-----  
Hash: SHA512

Marek Marczykowski-Górecki wrote:

> On Fri, Jan 30, 2015 at 02:30:45AM +0400, Oleg Artemiev wrote:

[...]

>> clarification: the backuping fails only when symlinks has been  
>> made by root.

>>

>> If the symlink is owned by the user that owns the image - image  
>> size to backup is still displayed incorrectly as size of  
>> symlink, but backup works okay.

>

> And the backup contains only a \*symlink\*, not the actual file... So  
> for now you need to backup your HDD manually. Perhaps we will solve  
> this problem in the future, but simply following the symlinks isn't  
> the best option, because we need to properly backup symlinks in  
> some places (at least icon.png).

>

Maybe I'm misunderstanding you, Marek, but I just tried restoring one of my backed up AppVMs, the directory of which was symlinked to a secondary drive at the time of the backup, and the restored AppVM contains all of my user data. (So, it appears the backup was not only a symlink; rather, it contained my actual data). Does the issue you are describing arise when only the private.img file is symlinked (rather than the whole AppVM directory being symlinked)?

-----BEGIN PGP SIGNATURE-----

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=4mTL  
-----END PGP SIGNATURE-----

## Marek Marczykowski-Górecki

unread,

Jan 30, 2015, 7:56:47 PM1/30/15

On Fri, Jan 30, 2015 at 07:26:37PM +0000, Axon wrote: > Marek Marczykowski-Górecki wrote: >

## Axon

unread,

Jan 30, 2015, 9:17:44 PM1/30/15

to Marek Marczykowski-Górecki, Oleg Artemiev, qubes...@googlegroups.com

-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA512

Ah, I understand now. That's very good to know; thank you!

-----BEGIN PGP SIGNATURE-----

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-----END PGP SIGNATURE-----