OpenNebula - Feature #5402
KVM support for luks volmes?

09/25/2017 03:55 PM - Laurence Gill

Status:	Pending		Start date:	09/25/2017
Priority:	Normal		Due date:	
Assignee:			% Done:	0%
Category:			Estimated time:	0.00 hour
Target version:				
Resolution:			Pull request:	

Description

Is there any plans to support luks volumes for virtual machines? I have not managed to find any discussions around this on any opennebula mailing lists.

https://libvirt.org/formatstorageencryption.html#StorageEncryptionLuks

I think it would require qemu 2.6:

https://wiki.qemu.org/ChangeLog/2.6#Block_devices_2

...and also libvirt 2.2.0, and I'd guess you need to create a secret on the hypervisor, unless it could be randomly generated if you are creating a empty datablock to install to. Although if you created the volume outside of opennebula I suppose you could pass the parameters through using the raw kvm contextualisation.

Thoughts? Silly idea?

Cheers

History

#1 - 10/03/2017 04:03 PM - Laurence Gill

I made a bit of progress on this, see
https://github.com/laurencegill/one/commit/d9ecac77d66af9fdecc4138c5ff2c436224363d7

Tested on debian jessie and you need to install the qemu/libvirt packages from backports to get the encryption support:
    apt-get -t jessie-backports install libvirt0
    apt-get -t jessie-backports install qemu-kvm qemu-utils qemu-block-extra qemu-system-common qemu-system-x86

Then create the image and import, create the libvirt secret etc, then you can attach the disk and it is decrypted, if it doesn't work you will still see the device as an encrypted luks disk (luksDump)

The question now is how to generate this the libvirt xml at deployment to contain the libvirt xml? I am a bit stuck here, does the LibVirtDriverKVM.cc file need changing, or is there a simpler way to change what is generated in the deployment file when instantiating the VM?

#2 - 10/04/2017 07:16 AM - Anton Todorov

There is an entry in the backlog addressing the option to alter the VM deployment XML before deploy (#4880).

Currently I am patching the vmm/kvm/deploy script to execute a script to edit the deployment XML file before it is passed to libvirt.

Best Regards,
Anton Todorov

#3 - 10/07/2017 11:55 AM - Laurence Gill

On balance, I figured it would be less lines of code to patch the driver:

https://github.com/laurencegill/one/commit/fa445665f07b8dadf46e65ecb73b772a9453ff15

Seems to work, requires some further testing though...