

OpenNebula - Feature #595

Support locally initiated migration

04/27/2011 08:06 PM - Lars Kellogg-Stedman

Status:	Closed	Start date:	04/27/2011
Priority:	Normal	Due date:	
Assignee:	Javi Fontan	% Done:	0%
Category:	Core & System	Estimated time:	0.00 hour
Target version:	Release 3.0	Pull request:	
Resolution:	fixed		
Description			
<p>The security model we have adopted for our environment does not permit ssh connectivity between the hosts in our VM cluster. All operations are initiated from the OpenNebula server. The idea here is that a compromise on one host does not lead to a compromise of the entire cluster.</p> <p>This model works fine with the stock libvirt tools. For example:</p> <pre>virsh -c qemu+ssh://host0/system migrate --live guest0 qemu+ssh://host1/system</pre> <p>This will contact host0 over ssh and host1 over ssh, which will then talk to each other over a TCP channel selected by KVM.</p> <p>This doesn't work with OpenNebula out of the box, because the "migrate" action is unilaterally initiated on the source host (host0 in the above example), which will then try to contact host1 over ssh. The attached patch introduces the "--local" (-L) option to one_vmm_ssh.rb, which accepts a comma-delimited list of actions that should be initiated on the OpenNebula server via local_action() rather than on a remote system via remotes_action(). This logic is currently implemented for the 'poll' and 'migrate' actions.</p> <p>The patch does not modify the default behavior of OpenNebula.</p> <p>The patch also introduces the "migrate_local" command to handle the local migrate action.</p> <p>These changes are against "release-2.2" in the git tree.</p> <p>With this patch in place, our VMM_MAD definition in oned.conf looks like this:</p> <pre>VM_MAD = [name = "vmm_kvm", executable = "one_vmm_ssh", arguments = "-t 15 -r 0 -L migrate kvm", default = "vmm_ssh/vmm_ssh_kvm.conf", type = "kvm"]</pre> <p>And the hosts only accept ssh connections originating from the OpenNebula server.</p>			

Associated revisions

Revision e5734fbc - 05/26/2011 10:14 PM - Javi Fontan

feature #595: vmm changes to support local exec

Added support code to driver libraries so they support both local and remote scripts execution. one_vmm_ssh driver was modified to test these changes.

Revision 89ac12eb - 05/27/2011 10:46 AM - Javi Fontan

feature #595: changed comments and formatting

Revision 856089c3 - 05/27/2011 11:05 AM - Javi Fontan

feature #595: refactored code to eliminate duplicate functionality

Revision a40f1ec5 - 05/27/2011 01:32 PM - Javi Fontan

feature #595: changed comments and formatting

Revision 06aff6c8 - 05/27/2011 05:10 PM - Javi Fontan

feature #595: do_actions now accepts default script name

Revision f330549c - 05/27/2011 05:11 PM - Javi Fontan

feature #595: imm_ssh driver modified to support local and remote

Revision c2ec3598 - 05/30/2011 02:53 PM - Javi Fontan

feature #595: scripts always get id and host as parameters

Revision 48c20f57 - 06/01/2011 04:12 PM - Javi Fontan

feature #595: moved read_configuration to OpenNebulaDriver

Revision 28917152 - 06/01/2011 04:15 PM - Javi Fontan

feature #595: changed initializers to use options hash

Revision a0853526 - 06/01/2011 04:15 PM - Javi Fontan

feature #595: added documentation

Revision 8974940f - 06/01/2011 04:17 PM - Javi Fontan

feature #595: added tests to OpenNebulaDriver

Revision 2fa21065 - 06/01/2011 04:19 PM - Javi Fontan

feature #595: remove whitespace

Revision dfa86ee3 - 06/01/2011 04:57 PM - Javi Fontan

feature #595: changed one_vmm_ssh to one_vmm_exec, sh driver is deleted

Revision 9d040161 - 06/01/2011 05:32 PM - Javi Fontan

feature #595: added one_vmm_sh wrapper

Revision ccc5b348 - 06/01/2011 05:36 PM - Javi Fontan

feature #595: changed one_vmm_ssh to _exec in oned.conf

Revision 4c124e45 - 06/01/2011 09:07 PM - Javi Fontan

feature #595: tests for OpenNebulaDriver#remotes_action

Revision b659e399 - 06/03/2011 03:16 PM - Javi Fontan

feature #595: tests for OpenNebulaDriver local_action and log

Revision b98e5412 - 06/03/2011 04:22 PM - Javi Fontan

feature #595: changed im_ssh to im_exec

Revision 99b22d8e - 06/03/2011 04:25 PM - Javi Fontan

feature #595: bug in im_ssh

Revision 77fd34bf - 06/03/2011 04:27 PM - Javi Fontan

feature #595: changed tm to use new libraries

Revision 053755f5 - 06/06/2011 11:57 AM - Javi Fontan

feature #595: changed ec2 driver to use new libraries

Revision ffc4a884 - 06/07/2011 06:20 PM - Javi Fontan

feature #595: added one_vmm_ssh wrapper

Revision d4117e6b - 06/07/2011 08:43 PM - Javi Fontan

feature #595: bug in tm driver

Revision dd92014d - 06/13/2011 01:40 PM - Javi Fontan

feature #595: cleanup comments

Revision df6b4c30 - 06/13/2011 01:42 PM - Javi Fontan

feature #595: change image driver to use new mad libraries

Revision c57a0959 - 06/13/2011 02:06 PM - Javi Fontan

feature #595: changed ec2 driver to use new mad libraries

Revision 62bb25a2 - 06/13/2011 02:16 PM - Javi Fontan

feature #595: cleanup comments and code

Revision 3b1cdb77 - 06/13/2011 02:50 PM - Javi Fontan

feature #595: changed auth driver to use new driver libraries

Revision 8a4f5211 - 06/13/2011 04:10 PM - Javi Fontan

feature #595: changed hook manager to use the new driver library

Revision b8264109 - 06/13/2011 04:10 PM - Javi Fontan

feature #595: changed vmm_dummy to use the new driver library

Revision 6b4243ac - 06/13/2011 04:11 PM - Javi Fontan

feature #595: changed im_dummy to use the new driver library

Revision 2b321e26 - 06/13/2011 04:12 PM - Javi Fontan

feature #595: comments and code formatting

Revision 1202c182 - 06/15/2011 05:15 PM - Javi Fontan

feature #595: im driver -l option does not get parameters

Revision b66fb90b - 06/15/2011 05:19 PM - Javi Fontan

feature #595: added im sh and ssh wrappers

Revision cb2140ac - 06/15/2011 05:21 PM - Javi Fontan

feature #595: removed im_sh driver

Revision b2ba7cd5 - 06/15/2011 05:23 PM - Javi Fontan

feature #595: im_ec2 does not have a remotes dir

Revision 6dfb6114 - 06/15/2011 05:26 PM - Javi Fontan

feature #595: now remotes copy is retried

Revision 867ae0f2 - 06/28/2011 07:42 AM - Javi Fontan

feature #595: added migrate_local action to kvm

Revision 5e6d2183 - 06/30/2011 03:18 PM - Javi Fontan

feature #595: bug in migrate_local script

Revision 19073b47 - 07/01/2011 11:53 AM - Javi Fontan

feature #595: added kvm migrate_local to install.sh

Revision 9fb10706 - 07/05/2011 01:58 PM - Javi Fontan

feature #595: changed tests as the code now is different

Old expectations are still in the test commented as I am not really sure the code or tests are right.

TODO: revise tests and library behavior

History

#1 - 04/28/2011 03:53 PM - Ruben S. Montero

- Assignee set to Javi Fontan

- Target version changed from Release 2.2 to Release 3.0

OK Thanks for the patch, this is scheduled for the next release.

Thanks again for the contribution :)

#2 - 05/26/2011 10:17 PM - Javi Fontan

- *Status changed from New to Assigned*

#3 - 06/30/2011 03:02 PM - Javi Fontan

Local migration script is added in 867ae0f. The way to specify the local migration is with arguments:

-l migrate=migrate_local

#4 - 07/01/2011 11:49 AM - Javi Fontan

- *Status changed from Assigned to Closed*

- *Resolution set to fixed*

Files

0002-support-locally-initiated-live-migration.patch	7.44 KB	04/27/2011	Lars Kellogg-Stedman
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