

## Arvados - Bug #14844

### [dispatch-cloud] Azure driver bugs discovered in trial run

02/13/2019 07:57 PM - Tom Clegg

<b>Status:</b>	Resolved	<b>Start date:</b>	02/28/2019
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assigned To:</b>	Peter Amstutz	<b>% Done:</b>	100%
<b>Category:</b>	Crunch	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	2019-03-13 Sprint		
<b>Description</b>			
<ul style="list-style-type: none"><li>• If creating a VM fails, an attempt should be made to delete the VM's dependent resources (nic/blob) before returning the error to Create()'s caller. As it stands, an unbounded number of new unused nics and blobs pile up during times when VMs can't be created and the dispatcher keeps retrying.</li><li>• nil pointer panic in (*AzureInstance)Address() -- perhaps a newly created instance that has no IP address assigned yet (see note)</li></ul>			
<b>Subtasks:</b>			
Task # 14892: Review 14844-cdc-azure-fixes			<b>Resolved</b>
<b>Related issues:</b>			
Related to Arvados - Story #13908: [Epic] Replace SLURM for cloud job schedul...		<b>Resolved</b>	
Related to Arvados - Story #14807: [arvados-dispatch-cloud] Features/fixes ne...		<b>Resolved</b>	<b>01/29/2019</b>

### Associated revisions

#### Revision a310d114 - 03/01/2019 02:55 PM - Peter Amstutz

Merge branch '14844-cdc-azure-fixes' closes #14844

Arvados-DCO-1.1-Signed-off-by: Peter Amstutz <[pamstutz@veritasgenetics.com](mailto:pamstutz@veritasgenetics.com)>

### History

#### #1 - 02/13/2019 07:57 PM - Tom Clegg

- Related to Story #13908: [Epic] Replace SLURM for cloud job scheduling/dispatching added

#### #2 - 02/13/2019 07:58 PM - Tom Clegg

```
panic: runtime error: invalid memory address or nil pointer dereference
[signal SIGSEGV: segmentation violation code=0x1 addr=0x10 pc=0x83aab5]
goroutine 102 [running]:
git.curoverse.com/arvados.git/lib/cloud.(*AzureInstance).Address(0xc420478500, 0x7f16da9a9628, 0xc420478500)
    /GOPATH/src/git.curoverse.com/arvados.git/lib/cloud/azure.go:633 +0x15
git.curoverse.com/arvados.git/lib/dispatchcloud/ssh_executor.(*Executor).setupSSHClient(0xc420368ea0, 0xc42061
a6e7, 0xc420368e01, 0xc4204b88a0)
    /GOPATH/src/git.curoverse.com/arvados.git/lib/dispatchcloud/ssh_executor/executor.go:178 +0x61
git.curoverse.com/arvados.git/lib/dispatchcloud/ssh_executor.(*Executor).sshClient(0xc420368ea0, 0x1, 0x0, 0x0
, 0x0)
    /GOPATH/src/git.curoverse.com/arvados.git/lib/dispatchcloud/ssh_executor/executor.go:153 +0x10f
git.curoverse.com/arvados.git/lib/dispatchcloud/ssh_executor.(*Executor).newSession.func1(0x8f7c01, 0x0, 0x9eb
aa0, 0xc4204b88b0)
    /GOPATH/src/git.curoverse.com/arvados.git/lib/dispatchcloud/ssh_executor/executor.go:128 +0x37
git.curoverse.com/arvados.git/lib/dispatchcloud/ssh_executor.(*Executor).newSession(0xc420368ea0, 0x0, 0x8e5c4
0, 0xc420253710)
    /GOPATH/src/git.curoverse.com/arvados.git/lib/dispatchcloud/ssh_executor/executor.go:136 +0xa0
git.curoverse.com/arvados.git/lib/dispatchcloud/ssh_executor.(*Executor).Execute(0xc420368ea0, 0x0, 0xc4201df7
40, 0x19, 0x0, 0x0, 0x0, 0x0, 0x0, 0x0, ...)
    /GOPATH/src/git.curoverse.com/arvados.git/lib/dispatchcloud/ssh_executor/executor.go:92 +0x73
git.curoverse.com/arvados.git/lib/dispatchcloud/worker.(*worker).probeBooted(0xc4203b0b00, 0x989064, 0xa, 0x97
c340, 0xc4204ed6e0)
    /GOPATH/src/git.curoverse.com/arvados.git/lib/dispatchcloud/worker/worker.go:349 +0x91
git.curoverse.com/arvados.git/lib/dispatchcloud/worker.(*worker).probeAndUpdate(0xc4203b0b00)
    /GOPATH/src/git.curoverse.com/arvados.git/lib/dispatchcloud/worker/worker.go:192 +0x1394
git.curoverse.com/arvados.git/lib/dispatchcloud/worker.(*worker).ProbeAndUpdate(0xc4203b0b00)
    /GOPATH/src/git.curoverse.com/arvados.git/lib/dispatchcloud/worker/worker.go:141 +0x57
created by git.curoverse.com/arvados.git/lib/dispatchcloud/worker.(*Pool).runProbes
    /GOPATH/src/git.curoverse.com/arvados.git/lib/dispatchcloud/worker/pool.go:636 +0x378
```

Evidently either IPConfigurations or PrivateIPAddress can be nil here:

```
func (ai *AzureInstance) Address() string {  
    return *(*ai.nic.IPConfigurations)[0].PrivateIPAddress  
}
```

**#3 - 02/20/2019 03:44 PM - Tom Morris**

- Target version changed from *To Be Groomed* to *Arvados Future Sprints*
- Story points set to 1.0

**#4 - 02/20/2019 04:41 PM - Tom Clegg**

- Related to Story #14807: *[arvados-dispatch-cloud] Features/fixes needed before first production deploy added*

**#5 - 02/27/2019 04:11 PM - Tom Morris**

- Target version changed from *Arvados Future Sprints* to *2019-03-13 Sprint*

**#6 - 02/27/2019 04:27 PM - Peter Amstutz**

- Assigned To set to *Peter Amstutz*

**#7 - 02/28/2019 08:58 PM - Peter Amstutz**

14844-cdc-azure-fixes @ [8c4fb97b1d34b5f8fc50d239698a08c35a63dac3](#)

- If PrivateIPAddress somehow isn't defined, return empty string (don't panic)
- If VM create fails, attempt to immediately clean the VHD and NIC corresponding to that VM (if it doesn't work, cleanup processes should still get around to it.)

**#8 - 02/28/2019 09:58 PM - Lucas Di Pentima**

This LGTM, thanks.

**#9 - 03/01/2019 02:56 PM - Peter Amstutz**

- Status changed from *New* to *Resolved*
- % Done changed from 0 to 100

Applied in changeset [arvados|a310d114bdc06b20cd007e6aff14b409e1c11e32](#).

**#10 - 03/01/2019 07:33 PM - Tom Morris**

- Release set to 15