

## Rudder - Bug #10787

### Xen domU detection issues with pvops kernels.

2017-05-25 23:58 - Florian Heigl

<b>Status:</b>	Released		
<b>Priority:</b>	N/A		
<b>Assignee:</b>			
<b>Category:</b>	Agent		
<b>Target version:</b>	3.1.24		
<b>Pull Request:</b>	<a href="https://github.com/Normation/rudder-techniques/pull/1203">https://github.com/Normation/rudder-techniques/pull/1203</a>	<b>Priority:</b>	64
<b>Severity:</b>	Major - prevents use of part of Rudder   no simple workaround	<b>Name check:</b>	
<b>UX impact:</b>		<b>Fix check:</b>	
<b>User visibility:</b>	Operational - other Techniques   Technique editor   Rudder settings	<b>Regression:</b>	
<b>Effort required:</b>	Very Small		

#### Description

It seems someone at CFEngine has been sleeping at the wheel.

All xen-related classes are not detected if the system is running a PVOps kernel. This is quite unfortunate, Xen went upstream like 5 years ago...

```
@ # dmesg | grep -i " Hypervisor detected: Xen"
[ 0.000000] Hypervisor detected: Xen
```

1. find /proc/xen/  
/proc/xen/ # ls /proc/xen/
2. ls -d /proc/xen  
/proc/xen
3. find /proc/xen  
/proc/xen
4. dmesg | grep -i " Hypervisor detected: Xen"  
[ 0.000000] Hypervisor detected: Xen
5. cf-promises --show-classes | grep -i xen  
#@

I've re-tested the whole thing with a 4.1.0 agent. Same issue.

Please convince the CFEngine guys to detect existence of /proc/xen at the very least. If it does contain the file 'control\_d' you're in a dom0.

Easiest way (no knowledge required) to detect a domU is by looking at /sys/module - if there's a number of xen\_blkfront or xen\_netfront drivers loaded, you are likely in a Xen domU with loaded PV drivers. No matter if full PV or HVM or PVHVM.

There are likely **better** ways but i think the discussion about "better" is best handled when the basics (it is detected at all) are restored.

#### Subtasks:

Bug # 11621: Error in parent ticket upmerge

Released

#### Associated revisions

Revision 5fba5030 - 2017-10-06 13:28 - Janos Mattyasovszky

Fixes #10787: Xen domU detection issues with pvops

#### History

#1 - 2017-05-29 14:16 - François ARMAND

- Related to Bug #10779: Memory detection of Xen hosts is incorrect added

**#2 - 2017-05-29 14:17 - François ARMAND**

- Related to deleted (Bug #10779: Memory detection of Xen hosts is incorrect)

**#3 - 2017-05-29 15:16 - François ARMAND**

- Target version set to 3.1.21

- Severity changed from Minor - inconvenience | misleading | easy workaround to Major - prevents use of part of Rudder | no simple workaround

- Priority changed from 0 to 36

**#4 - 2017-06-15 10:51 - Vincent MEMBRÉ**

- Target version changed from 3.1.21 to 3.1.22

**#5 - 2017-06-26 18:43 - Benoît PECCATTE**

- Priority changed from 36 to 52

**#6 - 2017-08-09 17:13 - Vincent MEMBRÉ**

- Target version changed from 3.1.22 to 3.1.23

- Priority changed from 52 to 50

**#7 - 2017-08-22 17:37 - Alexis Mousset**

Xen detection logic is improved in 4.1.7 (<https://github.com/cfengine/core/commit/5a3de6f8e81b476c136ef408af54c978933ca02c>), this may be fixed now.

**#8 - 2017-08-23 00:49 - Florian Heigl**

We just found this bug again (I had forgotten...) just two days ago.  
Gonna test a 4.1.7 agent on the system in question.

**#9 - 2017-08-24 16:29 - Florian Heigl**

Don't got a 4.1.7 package in our mirror yet.  
Is there a published RPM already?

**#10 - 2017-08-24 19:01 - Florian Heigl**

It's a lot closer, but still crap.

Good:

- xen is raised, this is correct.

Bad:

- xen\_domu is not raised.
- xen\_domu\_hv is raised and wrong.

PVops kernel is a PV domU (non-CPU-assisted)

HV would mean a CPU-assisted VM which is not the case.

It is possible that they can't tell it apart, but TBH it looks like no serious effort has been made or the CFEngine guys would have noticed this.

There's just 4 common cases to test, and I think only part of that has been tested.

```
# cf-promises --show-classes | grep -i xen
```

```
xen                inventory,attribute_name=Virtual host,source=agent,hardclass
xen_domu_hv        source=agent,hardclass
```

Ideally they'd support:

- xen
- xen\_dom0
- xen\_domu
- xen\_domu\_pv (classic or pvops)
- xen\_domu\_hv
- xen\_domu\_pvh

A limited solution would be:

- xen
- xen\_dom0
- xen\_domu

I dare say that incorrect detection is useless, and the current hv detection is simply wrong and useless. Besides that, it's nice to see that it's again able to detect xen at all.

But that's like saying thank you for putting the roof back on the house... :-)

**#11 - 2017-09-01 16:56 - Vincent MEMBRÉ**

- Target version changed from 3.1.23 to 3.1.24

**#12 - 2017-09-06 02:35 - Florian Heigl**

Note this also breaks the agent inventory because rudder doesn't have policy for hv xen. I can't even...

Modify like this to fix:

```
SuSE.(xen_domu_pv|xen_domu_hv)::  
"xen_tools_package" string => "xen-tools-domU";
```

Can we please at least have that.

**#13 - 2017-10-05 16:26 - François ARMAND**

- Effort required set to Very Small

- Priority changed from 50 to 65

The proposed evolution is very small and should be done.

I'm also very tempted to put it as "getting started", because lots of serious companies have virtualisation done with Xen.

**#14 - 2017-10-05 17:38 - Janos Mattyasovszky**

- Pull Request set to <https://github.com/Normation/rudder-techniques/pull/1202>

PR at <https://github.com/Normation/rudder-techniques/pull/1202>

**#15 - 2017-10-05 17:47 - Janos Mattyasovszky**

- Pull Request changed from <https://github.com/Normation/rudder-techniques/pull/1202> to <https://github.com/Normation/rudder-techniques/pull/1203>

PR rebased against 3.1:

<https://github.com/Normation/rudder-techniques/pull/1203>

**#16 - 2017-10-17 11:37 - Janos Mattyasovszky**

- Status changed from New to Pending release

- Priority changed from 65 to 64

Applied in changeset [rudder-techniques|5fba50308c27b84efbe34465ec140d5d521777a1](https://github.com/Normation/rudder-techniques/pull/1203).

**#17 - 2017-10-30 18:42 - Vincent MEMBRÉ**

- Status changed from Pending release to Released

This bug has been fixed in Rudder 3.1.24, 4.1.8 and 4.2.1 which were released today.

- 3.1.24: [Announce Changelog](#)
- 4.1.8: [Announce Changelog](#)
- 4.2.1: [Announce Changelog](#)
- Download: <https://www.rudder-project.org/site/get-rudder/downloads/>