Installer - Bug #25842

DNS resolver should not be case sensitive

01/11/2019 01:15 PM - Michael Schiessl

Status:	Closed			
Priority:	Low			
Assignee:	Ewoud Kohl van Wijngaarden			
Category:	foreman-installer script			
Target version:				
Difficulty:		**Fixed in Releases:**	1.22.0	
Triaged:	Yes	**Found in Releases:**	1.20.0	
Bugzilla link:		**Red Hat JIRA:**		
Pull request:	https://github.com/theforeman/foreman-installer/pull/325			

Description

I'm totally new here, so I'd like to say kindly hello to the project team in first.

I installed foreman on a bare metal installed CentOS7 like described in your documentation and faced against a minor bug in foreman-installer prerequsites.

The installer already fails if the hostname is case-sensitive for forward and reverse resolution only.

```
[root@FOREMAN ~]# foreman-installer -i
Reverse DNS foreman.testlab.site.example.local does not match hostname FOREMAN.testlab.site.example.local
Your system does not meet configuration criteria
[root@FOREMAN ~]#
[root@FOREMAN ~]#
[root@FOREMAN ~]# host FOREMAN.testlab.site.example.local
FOREMAN.testlab.site.example.local has address 10.20.30.40
[root@FOREMAN ~]# host 10.20.30.40
40.30.20.10.in-addr.arpa domain name pointer foreman.testlab.site.example.local.
[root@FOREMAN ~]#
```

DNS names should not be case sensitive.

See also here
http :// tools.ietf.org/html/draft-vixie-dnsext-dns0x20-00
https :// developers.google.com/speed/public-dns/docs/security?csw=1#randomize_case

As a workaround I added following line to /etc/hosts
10.20.30.40 esh-mgmtsrv01-t foreman.testlab.site.example.local

After the workaround the installer succeeded

Associated revisions

Revision 3cded20f - 03/11/2019 10:31 PM - Ewoud Kohl van Wijngaarden

Fixes #25842 - Correct DNS comparisons

DNS labels are case insenstive so regular string comparisons don't
always work. The Resolv::DNS::Name class implements the correct
comparisons.

History

#1 - 01/11/2019 01:26 PM - Ewoud Kohl van Wijngaarden

- Category set to foreman-installer script

- Triaged changed from No to Yes

- Found in Releases 1.20.0 added

The offending check appears to be
https://github.com/theforeman/foreman-installer/blob/575a642380833b4a4b1ca9d186e8ded26b4fd831/checks/dns.rb#L29

If you wrap the hostnames in Resolv::DNS::Name.create() you use Ruby's DNS-aware comparisons:

```
[1] pry(main)> Resolv::DNS::Name.create("y.z") == Resolv::DNS::Name.create("Y.Z")
=> true
```

This would be a great first contribution :)

Note we recently added a check to prevent uppercase hostnames. This was mostly motivated by Katello because these kind of bugs show up in more places.

https://github.com/theforeman/foreman-installer/blob/575a642380833b4a4b1ca9d186e8ded26b4fd831/checks/hostname.rb#L52-L53

That said, IMHO we should support this because the RFCs allow it.

#2 - 03/08/2019 03:44 PM - The Foreman Bot

- Status changed from New to Ready For Testing

- Assignee set to Ewoud Kohl van Wijngaarden

- Pull request https://github.com/theforeman/foreman-installer/pull/325 added

#3 - 03/11/2019 11:02 PM - Ewoud Kohl van Wijngaarden

- Status changed from Ready For Testing to Closed

Applied in changeset 3cded20f48fcdb8a4090d5381a9578074c10b92e.

#4 - 04/22/2019 09:12 AM - Tomer Brisker

- Fixed in Releases 1.22.0 added