NethServer 6 - Feature #2837
Reconfigure networking on NIC replacement

08/06/2014 11:11 AM - Davide Principi

Status:	CLOSED		**Start date:**	
Priority:	Normal		**Due date:**	
Assignee:			**% Done:**	100%
Category:	nethserver-base			
Target version:	v6.5			
Resolution:			**NEEDINFO:**	No

Description

Configure a new NIC by copying the parameters of an old one, if it does not exist any more.

This may happen

- In a VM, if the MAC address was changed
- If a NIC was replaced by a new one
- If the root disk is physically moved to a new hardware
- ...

Associated revisions

Revision 220ced17 - 09/16/2014 06:27 AM - Giacomo Sanchietti

Network config: handle interface replacement. Refs #2837

Revision 8f3b0d95 - 09/29/2014 09:14 AM - Davide Principi

Merged into master. Refs #2837

Reconfigure networking on NIC replacement

Revision e6f8bec6 - 09/30/2014 06:11 AM - Davide Principi

rc.local template: ignore "plymouth quit" exit code. Refs #2837

Revision d5169f39 - 09/30/2014 06:11 AM - Davide Principi

network-reset: show prompt line and compact message. Refs #2837

The 25 lines console limit could be exceeded with multiple interfaces.

History

#1 - 08/06/2014 11:12 AM - Davide Principi

- Target version set to v6.5

#2 - 08/06/2014 11:13 AM - Davide Principi

- Description updated

#3 - 09/09/2014 03:00 AM - Giacomo Sanchietti

- Category set to nethserver-base

- Status changed from NEW to TRIAGED

- % Done changed from 0 to 20

After the boot, all configured but not existing interfaces should be removed.

The new interfaces should be automatic reconfigured, otherwise the user should be able to assign the new interfaces with a simple command.

#4 - 09/09/2014 05:13 AM - Davide Principi

Giacomo Sanchietti wrote:

> *After the boot, all configured but not existing interfaces should be removed.*

By now this does not happen. Please consider also an USB Ethernet card that can be plugged/unplugged: its db settings are to be preserved?

Moreover, udev registers its name and Mac address to keep it consistent when it comes back.

#5 - 09/12/2014 03:01 AM - Giacomo Sanchietti

- Status changed from TRIAGED to ON_DEV

- Assignee set to Giacomo Sanchietti

- % Done changed from 20 to 30

#6 - 09/12/2014 05:22 AM - Giacomo Sanchietti

- Assignee deleted (Giacomo Sanchietti)

Simple script to replace only one network interface:

```
#!/usr/bin/perl -w

use esmith::NetworksDB;
use esmith::event;
my $ndb = esmith::NetworksDB->open();

my @removed;
my @free;

foreach ($ndb->ethernets()) {
  if ( ! -e "/sys/class/net/".$_->key) {
    push(@removed, $_->key);
  } else {
    my $role = $_->{'role'} || '';
    push (@free, $_->key) if ($role eq '');
  }
}

if (scalar(@removed) == 1 && scalar(@free) == 1) {
  my $old = $ndb->get($removed[0]);
  my $new = $ndb->get($free[0]);
```

```
        $old->delete_prop('hwaddr');
        $new->merge_props($old->props);
        $new->set_prop('device',$new->key);
        $old->delete();
    }

    exit 1 if(event_signal('interface-update') == 0);
    exit 0;
```

Just execute it after /usr/libexec/nethserver/update-networks-db.

#7 - 09/15/2014 10:56 AM - Giacomo Sanchietti

Proposed behavior:

- at boot, all non existing (no MAC address found in /sys) interfaces are reset to empty role
- if no green device is found:
  - if there is only one new interface, apply old green configuration to the new interface
  - if there are at least 2 network interfaces, propose a simple menu with all free interfaces. The chosen one will be the new green

#8 - 09/16/2014 03:21 AM - Giacomo Sanchietti

- Assignee set to Giacomo Sanchietti

#9 - 09/16/2014 06:27 AM - Giacomo Sanchietti

- Status changed from ON_DEV to MODIFIED

- % Done changed from 30 to 60

Implemented on branch b2837.

Also added a timeout: the script will exit if the user doesn't select anything within 120 seconds.

#10 - 09/16/2014 08:08 AM - Giacomo Sanchietti

- Status changed from MODIFIED to ON_QA

- Assignee deleted (Giacomo Sanchietti)

- % Done changed from 60 to 70

Package in nethserver-testing:

- ~~nethserver-base-2.3.0-3.0git220ced17.ns6.noarch.rpm~~
  ~~nethserver-base-2.3.0-10.0git8f3b0d95.ns6.noarch.rpm~~
  nethserver-base-2.3.0-12.0gitd5169f39.ns6.noarch.rpm

Test case 1

- Install on a clean machine
- After reboot the networks db it's unmodified

Test case 2

- Configure a machine with one interface
- Change the mac address of the interface
- After reboot the green configuration must be migrated to the new interface

Test case 3

- Configure a machine with 2 or more interfaces

- Change the mac address of the green interface
- After reboot a menu is shown to set the new green interface

Test case 3
- Configure a machine with 2 interfaces: GREEN + RED
- Change the mac address of the red interface
- After reboot the system must be accessible from green interface, red interface must be reconfigured from web interface

Test case 4
- Just mess up with network interfaces
- Report any strange behavior

#11 - 09/29/2014 09:13 AM - Davide Principi

- Assignee set to Davide Principi

#12 - 09/30/2014 09:20 AM - Davide Principi

- Status changed from ON_QA to VERIFIED

- Assignee deleted (Davide Principi)

- % Done changed from 70 to 90

Test case 1 OK

Test case 2 OK

Test case 3 OK

Test case 4 OK

#13 - 10/02/2014 12:15 PM - Davide Principi

- Status changed from VERIFIED to CLOSED

- % Done changed from 90 to 100

In nethserver-updates:
nethserver-base-2.4.0-1.ns6.noarch.rpm