Foreman - Feature #13887

Configure noVNC ports via web interface

02/24/2016 02:21 PM - Landon Thomas

Status:	New		
Priority:	Normal		
Assignee:			
Category:	Compute resources		
Target version:			
Difficulty:		**Fixed in Releases:**	
Triaged:		**Found in Releases:**	1.10.2
Bugzilla link:		**Red Hat JIRA:**	
Pull request:			

Description

I maintain instructional VMware VMs for a systems admin class (27 students run 4 VMs each). The class takes place in an Ubuntu 14.04 lab and ever since VMWare dropped their VMware Remote Console support for Linux, students connect through Foreman. That gives them convenient power controls and a console. The problem is as students connect to their 100+ VMs at once, websockify quickly runs out of available ports and the web GUI returns a variety of errors, primarily:

Failed to set console: execution expired

I can replicate the problem myself when I open a tab to each VM in my browser. After about 9 simultaneous console connections, the error starts appearing on subsequent tabs.

To fix this, I made these changes:

/usr/share/foreman/app/models/compute_resources/foreman/model/vmware.rb -

```
    def unused_vnc_port(ip)
      #10.times do
      #  port  = 5901 + rand(64)
      50.times do
        port  = 47000 + rand(2000)
        unused = (TCPSocket.connect(ip, port).close rescue true)
        return port if unused
      end
      raise "no unused port found"
    end
```

and /usr/share/foreman/lib/ws_proxy.rb -

```
  # Allowed ports to communicate with our web sockets proxy
  #PORTS = 5910..5930
  PORTS = 37000..39000
```

After making those changes and updating the network and hypervisor firewalls, I was able to open 89 simultaneous tabs running separate consoles. The hypervisors are VMware ESXi 5.1.0 and the VMs run a mix of Ubuntu 14.04, Windows 7 and Windows 2012. The Foreman server runs Ubuntu 14.04 with Foreman 1.10.2-1 via Apache/Passenger.

My feature request is to allow both port ranges to be modified and expanded in the web GUI settings menu rather than editing the code directly. I currently have a dpkg hold on 10 Foreman-related Ubuntu packages to prevent them from updating and breaking my changes.

History

#1 - 02/25/2016 03:07 AM - Dominic Cleal

- Category set to Compute resources