EXPANDING THE MATRIX OF USABLE OPERATING SYSTEMS FOR USE WITH VMWARE VSHERE WEB CLIENT 5.0.0

By Sean E. Staples, IT Professional

Abstract
VMware does not officially support vSphere Web Client 5.0.0 on Ubuntu 64-bit 11.x and RHEL 6.x 64-bit and its variants (e.g., CentOS, Scientific Linux, etc.). It is gravely important for organizations of heterogeneous operating systems, like universities, to provide developers with a wide range of platforms to access virtual cloud based compute services. VMware vSphere Web Client 5.0.0 can be a great cloud platform for organizations that already have an investment in VMware Infrastructure 5 rather than outsourcing developers compute and control needs to cloud providers such as Amazon EC2. Supported operating systems and browsers as of the paper writing are:

VMware vSphere Web Client 5.0.0 Supported OS’s and Browsers:

<table>
<thead>
<tr>
<th>Windows 32 bit and 64 bit</th>
<th>Internet Explorer 7 and 8 Mozilla Firefox 3.5 and 3.6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linux 32 bit</td>
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Amazon AWS support browsers:

<table>
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<th>Mozilla Firefox 7, 8</th>
<th>AWS endeavors to support new Firefox versions shortly after they are released. AWS does not support beta releases.</th>
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<td>Apple Safari 5</td>
<td></td>
</tr>
<tr>
<td>Google Chrome 14, 15</td>
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</tr>
<tr>
<td>Windows Internet Explorer 8, 9</td>
<td>AWS strongly recommends using Internet Explorer 9 over Internet Explorer 8. Internet Explorer 8 has a slower JavaScript engine that can result in timeouts.</td>
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</tbody>
</table>

Amazon AWS EC2 states, “Amazon EC2 currently supports a variety of operating systems including: RedHat Linux, Windows Server, openSuSE Linux, Fedora, Debian, OpenSolaris, CentOS, Gentoo Linux, and Oracle Linux. We are looking for ways to expand it to other platforms in future releases.” source - http://aws.amazon.com/ec2/faqs/#What_operating_system_environments_are_supported

This paper details the procedure to increase the operating system matrix for use with VMware vSphere Web Client 5.0.0, thereby increasing an organizations means to provide developers flexibility to access, administer, and customize their cloud compute experience.

Procedure
Increasing VMware’s operating system and browser usability matrix to run vSphere Web Client 5.0.0 on Ubuntu 64-bit 11.x and RHEL 64-bit 6.x and variants (e.g., CentOS, Scientific Linux, etc.) are as followed.

- Ensure Adobe Flash Player version 10.1.0 or greater is installed on the Linux box.
- Log into https://hostname:9443/vsphere-client/ (replacing “hostname” with that of your already configured and registered VMware vSphere Web Client (Server).
- Log into VMware vSphere Web Client with username and password.
Instructions on how to “Install client integration plug-in to view VM Console”.

- Click the link and download the VMware-VMRC.x86_64.bundle
- `sudo chmod 777 VMware-VMRC.x86_64.bundle`
- Install bundle: `./VMware-VMRC.x86_64.bundle`

### Ubuntu 64-bit 11.x
- When asked: “Please enter the full path to Firefox:”
  - Ubuntu 64-bit 11.x
    - `/usr/bin/firefox`
  - RHEL 64-bit 6.x and variants
    - `/usr/lib64/mozilla/plugins-wrapped`
- When asked: “Please enter the full path to your Firefox system-wide plugin directory. It is often found in /usr/lib/firefox/plugins or in /usr/lib/firefox-addons/plugins:”
  - Ubuntu 64-bit 11.10
    - `/usr/lib/firefox-addons/plugins`
  - RHEL 64-bit 6.1 and variants
    - `/usr/lib64/mozilla/plugins-wrapped`

### Install
- Additional configuration for RHEL 6.x:
  - Edit `/etc/sysconfig/nspluginwrapper`. Add `np-vmware-vmrc*` to the end of the “export IGNORE_WRAP...” line.


Note: This will instruct Firefox to symlink to the plugin directly rather than trying to wrap it.


- Restart Firefox

**Conclusion**

VMware vSphere Web Client 5.0.0 operating system matrix has been increased to provide developers flexibility to access, administer, and customize their cloud compute experience.

**VMware vSphere Web Client 5.0.0 operating systems usable matrix following above procedures:**

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<td>*Ubuntu 11.x 64-bit</td>
<td>Mozilla Firefox for Ubuntu Version 7.x</td>
<td></td>
</tr>
<tr>
<td>*RHEL Linux 6.x 64-bit</td>
<td>Mozilla Firefox 3.6.x</td>
<td></td>
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*After above configuration modifications. No guarantees, simply how it worked for me.*

VMware version and build info on above configuration:
Ubuntu 11.x 64-bit:
vSphere Web Client: Version 5.0.0 Build 423753
vSphere vCenter Server: Version 5.0.0 Build 455964
Client integration plug-in: Version 4.0.0 Build 422570
Browser: Firefox Version 7.0.1

RHEL Linux 6.x 64-bit and variants:
vSphere Web Client: Version 5.0.0 Build 423753
vSphere vCenter Server: Version 5.0.0 Build 455964
Client integration plug-in: Version 4.0.0 Build 422570
Browser: Firefox Version 3.6.17

**Future Goals** - Include Mac OSX into the matrix of usable platforms. Include vApp cloning from Web Client.