Install and Run DRS Doctor on CentOS 6.5

Pre-requisites:
Python 2.7
Pyyaml
Pymomi

The biggest hurdle to get DRS Doctor installed on a CentOS 6.5 instance is getting the prerequisites installed. The yum package manager uses Python 2.6, and it's configured to be the system default used. Replacing or upgrading to Python 2.7 will break yum, so it needs to be installed side-by-side. This should help you get Python 2.7 downloaded and installed so DRS can successfully run. Python is used to actually run DRS Doctor, but PIP is used to install the Pyyaml and Pymomi binaries that DRS Doctor also requires. So, we'll need to install both PIP and Python 2.7.

Install the EPEL Repository
First thing is to install the Extra Packages for Enterprise Linux (EPEL) repository. This is a repository contains extra packages for Enterprise Linux. You're going to need this to install PIP. The good news is this can easily be done using yum. Simply run:

yum install epel-release
…done.

Install Software Collections repository
Next thing you'll need to install is the Software Collections repository. This is yet another repository of pre-compiled packages. You'll need to to get Python 2.7. Run:

yum install centos-release-scl
…done.

Install Python 2.7
Now that you have the extra repositories configured, you can use yum to install PIP and Install Python 2.7. Run:

yum install python27
…done.

Install PIP
Now install PIP. Run:

yum install python-pip
…done.

Upgrade PIP

After PIP is installed, you can use PIP to upgrade itself. Simply run:

pip install --upgrade pip
…done.

Easy peezy so far!

Now is where things get slightly tricky, and you have to do them in the proper directories, or it won't work, so pay attention to what you're doing.

Update /etc/ld.so.conf
You need to append the path for the Python 2.7 library location to this file. If you used the previous steps to install Python 2.7, the yum package manager should have installed Python 2.7 to opt/rh/python27/root/. If you installed Python manually or built it from source, you probably don't need this instruction, and you are on your own.

Now, update the file. Simply add *"/opt/rh/python27/root/usr/lib64*" (no quotes) to a new line at the end of the file. It's really that simple. I use VI, but you are welcome to use any text editor you enjoy using. If you really enjoy using a text editor, take a moment to re-evaluate this is what you really want to be doing with your life.

Now you need to reload the library cache, and search locations. Just run:

/sbin/ldconfig
…done.

If you have done everything properly to this point, you should be able to run Python 2.7. A simple check is to check the current version. Just run:

/opt/rh/python27/root/usr/bin/python –version

In my system, it returned 2.7.8. This is good since that is the version currently stored in the repository you added earlier.

Now for the last few steps.

Install Pyyaml
Before you confinure, navigate to the */opt/rh/python27/root/usr/bin/* directory. This is really important. If you are not in this folder, Pyyaml is not going to install in the right place and DRS Doctor will not run. Once you navigate to this folder, run:

./python -m pip install Pyyaml
…done

Install pyvmomi
Again, confirm you are in the */opt/rh/python27/root/usr/bin/* directory. If not, then you messed up the previous step. Way to go! Listen better next time.

If using Python 2.7.9, the latest version of pymoni will work just fine. If using < 2.7.9, you must install 5.5.0.2014.1.1. To force the install of 5.5.0.2014.1.1, run the following command.

./python -m pip install pyvmomi==5.5.0.2014.1.1

If you are running Python >=2.7.9, just omit the "==5.5.0.2014.1.1" part and PIP will install the latest version.

At this point, you should have all the prerequisites installed on your system to run DRS Doctor.

Running DRS Doctor

Download the tar from the VMware Flings site. Once it's downloaded, copy to a folder you wish to launch the application. DRS Doctor can also be used to monitor multiple clusters. If you wish to use DRS Doctor to run against multiple clusters, you must copy the contents into separate folders for each cluster you wish to monitor.

Example:
/root/cluster1/DrsDoctor/Drm-Diagnostic-Tool/doctor
/root/cluster2/DrsDoctor/Drm-Diagnostic-Tool/doctor

Unpack the TAR File
To untar the file run:
Tar xvf <path to tar>

It should unpack the file with the proper folder structure:

<current path>/DrsDoctor/Drm-Diagnostic-Tool/

Set the configuration
The configuration file can be found at */DrsDoctor/Drm-Diagnostic-Tool/conf/testbed.conf*.
Using your favorite text editor, edit the following items:
vcip = IP or hostname of the VC server. If using SSL certificate verification, you must use the fqdn.
vc_usr = SSO user with an administrator role in the cluster you wish to monitor
cluster = the cluster you wish to monitor. Spaces are allowed between the single quotes
ca_certs = (Optional) CA pem file location. If using SSL certificate verification, you must copy the root CA certificates from the SSO or PSC server. If SSL certificate verification is not used, the comment out this entire line.

Run DRS Doctor
You are able to run DRS Doctor from any directory you want by using the following command:

/opt/rh/python27/root/usr/bin/python ./doctor

It's pretty important you first run the Python from this folder first, and then the DRS Doctor binary. Otherwise, you will run with the system default version, and it will refuse to run.

Have a happy day.