HOW TO Install Nagios Core on RedHat Enterprise Linux Systems...... Without Problems :-)

(Review for release 4.2.1)

1- Install system software needed by nagios installation

We begin installing and verifying the package requirements and so, as root user, submit the following command:

```
yum install -y wget httpd php gcc glibc glibc-common gd gd-devel make net-snmp
```

2- Download Nagios core and main plugin

When I'm writing this document the latest available version of nagios core is the 4.2.1 and you can download it browsing at sourceforge but I've placed a copy here: http://giuseppeturri.it/nagios-4.2.1.tar.gz
 or directly by wget with this command:

```
cd /tmp
wget http://giuseppeturri.it/nagios-4.2.1.tar.gz
wget http://giuseppeturri.it/nagios-plugins-2.1.2.tar.gz
```

Note: if your system is behind a proxy server you may need to configure the proxy to allow the internet connection to wget following these steps
- *add your proxy to /erc/wgetrc configuration file (uncomment and modify the type of proxy used in your network)*
- *uncomment the use_proxy = on setting or, if you don't want to use the proxy at all you may turn off this setting and issue the wget command followeb by --proxy=on --proxy-user=user --proxy-password=password and then the url (example wget --proxy=on --proxy-user=user --proxy-password=password* http://www.xxx.zzz*)*

3- Installing Nagios core & main plugin

Once Downloaded the tar file we have to create the user and group for nagios and so submit these commands:

- ⚑ `useradd nagios`
- ⚑ `groupadd nagcmd`
- ⚑ `usermod -a -G nagcmd nagios`

Now we can extract the software from the tarball

- ⚑ `tar zxf nagios-4.2.1.tar.gz`
- ⚑ `tar zxf nagios-plugins-2.1.2.tar.gz`

And install the core nagios software…

- ⚔ `cd nagios*`
- ⚔ `./configure --with-command-group=nagcmd`
- ⚔ `make all`
- ⚔ `make install`
- ⚔ `make install-init`
- ⚔ `make install-config`
- ⚔ `make install-commandmode`
- ⚔ `make install-webconf`

…and the main plugin

- ⚔ `cd ../nagios-plugin*`
- ⚔ `./configure --with-nagios-user=nagios --with-nagios-group=nagios`
- ⚔ `make`
- ⚔ `make install`

We can start the nagion and httpd services by issuing the command

- ⚔ `service httpd start`
- ⚔ `service nagios start`

Terminated the installation command we can set the system to startup nagios and httpd at startup time:

- ⚔ `chkconfig nagios --level 35 on`
- ⚔ `chkconfig httpd --level 35 on`

Now we have to create an user to access to the nagios web interface so we create an user named nagiosadmin defining a password for it:

`htpasswd -c /usr/local/nagios/etc/htpasswd.users nagiosadmin`

At this point the nagios core is installed, up and running.
You can access to your nagios installation by browsing the url http://yourservername/nagios

You'll be prompt a basic authentication where you have to use the nagiosadmin account created with the latest command submitted.

Every time you modify a nagios configuration file you may verify the configuration by the command

`/usr/local/nagios/bin/nagios -v /usr/local/nagios/etc/nagios.cfg`

and, if all is ok, you can restart the nagios service to execute the modified code.

The next chapter of the guide is for helping you in case of problems. To verify if your installation is free of problems and to check the status of your installation I suggest you to:
- *Try an access through the web interface*
- *Try to access to the "services" section and try to re-schedule a check now*
- *Try to verify the mail notification (change the email address in the /usr/local/nagios/etc/objects/contacts.cfg configuration file).*

4- MOST COMMON PROBLEMS RESOLUTION

⚑ **Error 403 – Forbidden you don't have permission to access /nagios/ on this server.**
when you try to access the nagios web interface

Check the installation of the php software on your system
```
yum install php
service httpd restart
```

⚑ **Error: Could not open command file '/var/nagios/rw/nagios.cmd' for update!**
When you try to re-schedule a check of a service by nagios web interface

```
chown nagios.nagcmd /usr/local/nagios/var/rw
chmod g+rwx /usr/local/nagios/var/rw
chmod g+s /usr/local/nagios/var/rw
usermod -G nagcmd apache
service httpd restart
service nagios restart
```

⚑ **You don't receive any email notification and/or you are able to send email notification by command line**
I've spent a lot of time whit this kind of problem....

So check if you are able to send email by terminal line as root user with this command:
⚑ `/usr/bin/printf "Notification Test" | /bin/mail -s "This is a test" your-email@address`

If you can execute the command and you receive the email now we can try to submit the same command as nagios user so execute:
⚑ `su - nagios`
⚑ `/usr/bin/printf "Notification Test" | /bin/mail -s "This is a test" your-email@address`

Probably you'll get this error

WARNING: RunAsUser for MSP ignored, check group ids (egid=503, want=51)
can not chdir(/var/spool/clientmqueue/): Permission denied
Program mode requires special privileges, e.g., root or TrustedUser.

If you have a similar error message we can solve it by issuing, **as root user**, this command:

⚑ `chmod 2755 /usr/sbin/sendmail.sendmail`
⚑ `service sendmail restart`

Go to NAGIOS website ➔ http://www.nagios.com/#ref=s57X3l