**Nagios installation and configuration**

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*# yum install gd gd-devel gcc glibc glibc-common httpd php make net-snmp*

Download Nagios (Nagios Core) Software and Nagios Plugins  
  
If you wish to download the latest version, please visit https://www.nagios.org/download/core  
  
I have downloaded from the below direct link and kept in my linux server already in the folder /home/learnitguide.  
  
Nagios Core Link : http://prdownloads.sourceforge.net/sourceforge/nagios/nagios-4.1.0rc1.tar.gz  
Nagios Plugin Link : http://nagios-plugins.org/download/nagios-plugins-2.0.3.tar.gz

*[learnitguide@nagiosserver ~]# cd /home/learnitguide/*

Extract Nagios Core and its Plugins:

*[learnitguide@nagiosserver ~]# tar -xvf nagios-4.1.0rc1.tar.gz*  
*[learnitguide@nagiosserver ~]# tar -xvf nagios-plugins-2.0.3.tar.gz*

Before going for installation, please create a dedicated user and group for nagios.

*[learnitguide@nagiosserver ~]# useradd nagios*

*[learnitguide@nagiosserver ~]# passwd nagios*  
*Changing password for user nagios.*  
*New UNIX password:*  
*BAD PASSWORD: it is based on a dictionary word*  
*Retype new UNIX password:*  
*passwd: all authentication tokens updated successfully.*

Create a new nagcmd group for allowing external commands to be submitted through the web interface. Add both the nagios user and the apache user to the group.

*[learnitguide@nagiosserver ~]# groupadd nagcmd*

*[learnitguide@nagiosserver ~]# /usr/sbin/usermod -a -G nagcmd nagios*  
*[learnitguide@nagiosserver ~]# /usr/sbin/usermod -a -G nagcmd apache*

Basic Configuration and Installation of Nagios  
  
Now, first we will configure Nagios Core and to do so we need to go to Nagios directory and run configure file and if everything goes fine, it will show the output in the end as type 'make all' to compile the main program and CGIs.

*[learnitguide@nagiosserver ~]# cd nagios-4.1.0rc1*

*[learnitguide@nagiosserver nagios-4.1.0rc1]# ./configure --with-command-group=nagcmd*

Now, after configuring we need to Compile and install all the binaries with make command and make install command will install all the needed libraries in your machine and we can proceed further.

*[learnitguide@nagiosserver nagios-4.1.0rc1]# make all*

*[learnitguide@nagiosserver nagios-4.1.0rc1]# make install*  
  
*Sample Output:*  
 *\*\*\* Main program, CGIs and HTML files installed \*\*\**  
 *You can continue with installing Nagios as follows (type 'make'*  
*without any arguments for a list of all possible options):*  
 *make install-init*  
*- This installs the init script in /etc/rc.d/init.d*  
 *make install-commandmode*  
*- This installs and configures permissions on the*  
*directory for holding the external command file*  
 *make install-config*  
*- This installs sample config files in /usr/local/nagios/etc*

Execute all commands as show in the above output one by one as follows,  
  
Following command will install the init scripts for Nagios.

*[learnitguide@nagiosserver nagios-4.1.0rc1]# make install-init*

*/usr/bin/install -c -m 755 -d -o root -g root /etc/rc.d/init.d*  
*/usr/bin/install -c -m 755 -o root -g root daemon-init /etc/rc.d/init.d/nagios*  
 *\*\*\* Init script installed \*\*\**  
  
To make nagios work from command line we need to install command-mode.  
 *[learnitguide@nagiosserver nagios-4.1.0rc1]# make install-commandmode*  
*/usr/bin/install -c -m 775 -o nagios -g nagcmd -d /usr/local/nagios/var/rw*  
*chmod g+s /usr/local/nagios/var/rw*  
 *\*\*\* External command directory configured \*\*\**

Next, install sample nagios files, please run following command.

*[learnitguide@nagiosserver nagios-4.1.0rc1]# make install-config*

. Customizing Nagios Configuration:  
  
Open the “contacts.cfg” file with your choice of editor and set the email address associated with the nagiosadmin contact definition to receiving email alerts.

*[learnitguide@nagiosserver nagios-4.1.0rc1]# vi /usr/local/nagios/etc/objects/contacts.cfg*

*##############################################################################*  
*CONTACTS*  
*##############################################################################*  
 *# Just one contact defined by default - the Nagios admin (that's you)*  
*# This contact definition inherits a lot of default values from the 'generic-contact'*  
*# template which is defined elsewhere.*  
 *define contact{*  
*contact\_name           nagiosadmin             ; Short name of user*  
*use           generic-contact    ; Inherit default values from generic-contact template (defined above)*  
*alias         Nagios Admin            ; Full name of user*  
*email   admin@learntiguide.net    ; <<\*\*\*\*\* CHANGE THIS TO YOUR EMAIL ADDRESS \*\*\*\*\*\**  
*}*

. Install and configure Web Interface for Nagios:  
  
We are done with all configuration in the backend, now we will configure Web Interface for Nagios with following command. The below command will Configure Web interface for Nagios and a web admin user will be created “nagiosadmin”.

*[learnitguide@nagiosserver ~]# make install-webconf*

*/usr/bin/install -c -m 644 sample-config/httpd.conf /etc/httpd/conf.d/nagios.conf*  
 *\*\*\* Nagios/Apache conf file installed \*\*\**

In this step, we will be creating a password for “nagiosadmin”. After executing this command, please provide a password twice and keep it remember because this password will be used when you login in the Nagios Web interface.

*[learnitguide@nagiosserver ~]# htpasswd -s -c /usr/local/nagios/etc/htpasswd.users nagiosadmin*

Restart Apache to make the new settings take effect.

*[learnitguide@nagiosserver ~]# service httpd restart*

*Stopping httpd:                                            [  OK  ]*  
*Starting httpd:                                            [  OK  ]*

Compile and Install Nagios Plugin:  
  
We have downloaded nagios plugins in /home/learnitguide/nagios-plugins-2.0.3, Go there and configure and install it as directed below.

*[learnitguide@nagiosserver nagios-plugins-2.0.3]# cd /home/learnitguide/nagios-plugins-2.0.3*

*[root@RHEL5 downloads]# cd nagios-plugins-1.5*  
*[learnitguide@nagiosserver nagios-plugins-2.0.3]# ./configure --with-nagios-user=nagios --with-nagios-group=nagios*  
*[learnitguide@nagiosserver nagios-plugins-2.0.3]# make*  
*[learnitguide@nagiosserver nagios-plugins-2.0.3]# make install*

. Verify Nagios configuration file:  
  
Now we are all done with Nagios configuration and its time to verify it and to do so please insert following command. If everything goes smooth it will show up similar to below output.

*[learnitguide@nagiosserver nagios-plugins-2.0.3]# /usr/local/nagios/bin/nagios -v /usr/local/nagios/etc/nagios.cfg*

. Add Nagios Services to System Startup**:**  
  
To make Nagios work across reboots, we need to add nagios and https with chkconfig command.

*[learnitguide@nagiosserver nagios-plugins-2.0.3]# chkconfig --add nagios*  
*[learnitguide@nagiosserver nagios-plugins-2.0.3]# chkconfig --level 35 nagios on*  
*[learnitguide@nagiosserver nagios-plugins-2.0.3]# chkconfig --add httpd*  
*[learnitguide@nagiosserver nagios-plugins-2.0.3]# chkconfig --level 35 httpd on*

Restart Nagios to make the new settings take effect.

*[learnitguide@nagiosserver nagios-plugins-2.0.3]# service nagios start*

*nagios is stopped*  
*Starting nagios:                                           [  OK  ]*

Link for reference

https://www.tecmint.com/how-to-add-linux-host-to-nagios-monitoring-server/

