******************* NAGIOS *******************

NAGIOS:-
　　　　　:- Nagios is an open-source monitoring system used to monitor the performance and availability of networked devices and infrastructure components, such as servers, switches, applications, and services. It provides real-time notifications and alerts to help system administrators quickly detect and resolve issues before they become major problems.

=>It run on port no-5666
=>It is a software.
=>Nagios is a monitoring tool.we use to find out information about nodes and there services on master node.
=>cluster monitor.
=>server package-nagios
=>client/node package-NRPE

PLUGIN:-
—--------------
-A collection of plugins that can be used to monitor various aspects of networked devices and infrastructure components.
-It is tool which run on node.
-it helps to find the error of node and send the information to NRPE.
-It is scripting code

NRPE(Nagios Remote Plugin Executor):-
—----------
-It is tool which run on node.
-Using this tool we would to send the information to nagios which run on server.
-Allows remote systems to execute Nagios plugins and return performance data to the Nagios server.

Nagios Core: The main Nagios monitoring system that includes the Nagios daemon, web interface, and other components.

Nagios XI: A commercial version of Nagios that includes additional features and is supported by a paid support team.

Nagios Mobile: A mobile app that allows administrators to access Nagios monitoring data and receive alerts on their mobile devices.

: A set of tools and plugins that allow administrators to create custom visualizations of Nagios monitoring data.These tools can be used together to provide a comprehensive and scalable monitoring solution for organizations of all sizes.

============================== LAB ====================================
=> Create two machine using nat network and make 1 server and 1 client
—- On both system (server & Client) —-
Turn off the firewall
   1. Systemctl disable firewalld

Turn off selinux
   2. vi /etc/selinux/config

```
# This file controls the state of SELinux on the system.
# SELINUX= can take one of these three values:
#     enforcing - SELinux security policy is enforced.
#     permissive - SELinux prints warnings instead of enforcing.
#     disabled - No SELinux policy is loaded.
SELINUX=disabled
# SELINUXTYPE= can take one of three values:
#     targeted - Targeted processes are protected,
#     minimum - Modification of targeted policy. Only selected processes are protected.
#     mls - Multi Level Security protection.
SELINUXTYPE=targeted
```

       SELINUX='enable'   to   'disabled'
# **do restart the system**
   3. Init 6

set ip and host name in host file of both system
   4. vi /etc/hosts

```
127.0.0.1    localhost localhost.localdomain localhost4 localhost4.localdomain4
::1          localhost localhost.localdomain localhost6 localhost6.localdomain6
192.168.174.131 server
192.168.174.132 client
```

make sure both system are able to ping each other

—-- On Server—
—--------------------
#
1. wget
https://github.com/openhpc/ohpc/releases/download/v1.3.GA/ohpc-release-1.3-1.el7.x86_64.rpm

install ohpc-release
2. Yum install ohpc-release -y

install ohpc-nagios
3. yum install ohpc-nagios -y

change file name
4. mv /etc/nagios/conf.d/services.cfg.example /etc/nagios/conf.d/services.cfg
5. mv /etc/nagios/conf.d/hosts.cfg.example /etc/nagios/conf.d/hosts.cfg

For change the password of nagios
6. htpasswd -c /etc/nagios/passwd nagiosadmin
         Password:0000

Make nagios direatory
7. mkdir -p /var/run/nagios

change owner of nagios
8. chown -R nagios:nagios /var/run/nagios/

start nagios service
9. systemctl start nagios

start httpd service
10. systemctl start httpd

login nagios on browser
         -Go to browser and type 'ip-address/nagios'
         Username: nagiosadmin
         Password: 0000

——----- On Client ——-----
——------------------------
install ohpc package
         1. wget
https://github.com/openhpc/ohpc/releases/download/v1.3.GA/ohpc-release-1.3-1.el7.x86_64.rpm

install ohpc-release
         2. yum install ohpc-release-1.3-1.el7.x86_64.rpm

install nagios and nrpe package
         3. yum install nagios-plugins-all nrpe-ohpc

make a directory
         4. mkdir -p /var/log/nagios

 # Change owner to nagios file
>   5. chown -R nrpe:nrpe /var/log/nagios

 # Edit this file
>   6. vi /etc/nagios/nrpe.cfg

```
 99 # Note: The daemon only does rudimentary checking of the client's IP
100 # address.  I would highly recommend adding entries in your /etc/hosts.allow
101 # file to allow only the specified host to connect to the port
102 # you are running this daemon on.
103 #
104 # NOTE: This option is ignored if NRPE is running under either inetd or xinetd
105
106 allowed_hosts=192.168.174.131
107
108
109
110 # COMMAND ARGUMENT PROCESSING
111 # This option determines whether or not the NRPE daemon will allow clients
112 # to specify arguments to commands that are executed.  This option only works
113 # if the daemon was configured with the --enable-command-args configure script
```

In line no 106 write server 'ip address'

 # Restart nerp service
>   7. systemctl restart nrpe

 # Restart restart httpd service
>   8. systemctl restart httpd

Again On Server
—--------------------------
 # Edit this file
●   vi /etc/nagios/conf.d/hosts.cfg
●

```
 1 ## Linux Host Template ##
 2 define host{
 3         name linux-box ; Name of this template
 4         use generic-host ; Inherit default values
 5         check_period 24x7
 6         check_interval 5
 7         retry_interval 1
 8         max_check_attempts 10
 9         check_command check-host-alive
10         notification_period 24x7
11         notification_interval 30
12         notification_options d,r
13         contact_groups admins
14         register 0 ; DONT REGISTER THIS - ITS A TEMPLATE
15 }
16
17 define hostgroup {
18         hostgroup_name compute
19         alias compute nodes
20         members client
21 }
22
23 # example configuration of 4 remote linux systems
24 define host{
25         use linux-box       ; Inherit default values from a template
26         host_name client    ; The name we're giving to this server
27         alias client        ; A longer name for the server
28         address 19.168.174.132   ; IP address of Remote Linux host
29 }
30
31
```

Line no 20:write your client hostname
From line no 26: Write client hosname and their 'ip-address' as your no of host

Restart httpd
Restart nagios