**Nagios:**

Installation and Configuration of Nagios

Nagios is an open source software that can be used for network and infrastructure monitoring. Nagios will monitor servers, switches, applications and services. It alerts the System Administrator when something went wrong and also alerts back when the issues has been rectified.

Nagios is useful for keeping an inventory of your servers, and making sure your critical services are up and running. Using a monitoring system, like Nagios, is an essential tool for any production server environment.

With Nagios you can:

– Monitor your entire IT infrastructure.

– Identify problems before they occur.

– Know immediately when problems arise.

– Share availability data with stakeholders

– Detect security breaches.

– Plan and budget for IT upgrades.

– Reduce downtime and business losses.

**Installing Nagios on Ubuntu:**

--> Use the tasksel to install the group of packages on ubuntu

$ sudo apt-get install tasksel

$ sudo tasksel (to start in GUI)

$ sudo tasksel install lamp-server

-- set the password for the mysql

$ sudo apt-get install nagios3 -y

-- postfix configuration. This is for mail configuration

-- internet Site

-- Domain Name (nagios.lab)

-- Web Admin Password

$ sudo service nagios3 status

$ sudo nagios3 -v /etc/nagios/nagios.cfg

$ sudo service nagios3 start

--> Access the Nagios console

URL: http://IP:80/nagios3

UN: nagiosadmin

PWD: \*\*\*\*\*\*

**Configuration Files and Post installation Tweaking:**

--> The main configuration file is nagios.cfg. The following properties

-- Log file location

-- The file location of commnds.cfg file

-- status update

-- status refresh interval

-- nagios user and group

--> Plugins location

--/etc/nagios-plugins/config/disk.cfg

--> Verifying Nagios config file

-- sudo nagios3 -v /etc/nagios/nagios.cfg (Syntax verification)

--> **Exception**:

-- Nagios is currently not checking for external commands

-- Go to nagios.cfg file and check the external\_commands =1 should be one

-- -- sudo nagios -v /etc/nagios/nagios.cfg (Syntax verification)

-- restart the service (sudo service nagios restart)

--> **Exception:**

-- Could not stat() command file 'nagios.cmd' file

-- set the permissions

-- service nagios3 stop

--dpkg-statoverride --update --add nagios www-data 2710 /var/lib/nagios3/rw

--dpkg-statoverride --update --add nagios nagios 751 /var/lib/nagios3

-- service nagios3 start

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**Plugins:**

**-->** The commands location is /etc/nagios-plugins

--> The above commands refers the plugins which are located /usr/lib/nagios/plugins

$ ./check\_disk -h (to get the complete help of the commands)

$ ./check\_disk -w 10% -c 5% -p /

$ ./check\_ping -h

$ ./check\_ping -H 192.168.56.66 -w 0.10,1% -c 0.20,1% (milli seconds, packet %)

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**Client Configuration:**

**Install NRPE Service**

*sudo apt-get install nagios-nrpe-server nagios-plugins*

**Configure NRPE**

After the installation is complete, edit the nrpe file */etc/nagios/nrpe.cfg*:

*vim /etc/nagios/nrpe.cfg*

... and add Nagios Server IP *192.168.1.9* to the *server\_address*.

*server\_address=192.168.1.9*

**Restart NRPE**

*service nagios-nrpe-server restart*

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**Host Definitions:**

--> Go to /etc/nagios3/conf.d/

$ more localhost\_nagios2.cfg (let's explore the Host)

$ more generic-host\_nagios2.cfg (let's explore the generic host file )

Note: contact\_groups should be defined in the contacts\_nagios2.cfg

Note: Time periods should be defined in the 'timeperiods\_nagios2.cfg'

--> Create one more cfg file to define new hosts (client.cfg)

$ vi client.cfg

define host{

use generic-host ; Name of host template to use

host\_name clientHost

alias My Client Host

address 192.168.56.65

}

--> Let's restart the nagios

$ service nagios3 restart

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**Service Definition:**

--> Go to /etc/nagios3/conf.d/

$ more localhost\_nagios2.cfg (let's explore the Host template)

$ more generic-service\_nagios2.cfg (let's explore the Service template)

$ vi client.cfg

define service {

use generic-service

host\_name clientHost

service\_description SSH

check\_command check\_ssh

notifications\_enabled 0

}

define service{

use generic-service ; Name of service template

host\_name clientHost

service\_description Disk Space

check\_command check\_all\_disks!20%!10%

}

--> Let's restart the nagios

$ service nagios3 restart

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--> open the /etc/nagios3/conf.d/contacts\_nagios2.cfg

--> copy the contact element and add one more element in the same file

define contact{

contact\_name admin

alias admin

service\_notification\_period 24x7

host\_notification\_period 24x7

service\_notification\_options w,u,c,r

host\_notification\_options d,r

service\_notification\_commands notify-service-by-email

host\_notification\_commands notify-host-by-email

email devopstestmail@gmail.com

}

--> Then add the contact name in the contacts Group in the same file

--> Save and Quit

Configure Email:

--> Go to /etc/postfix/main.cf

$ vi /etc/postfix/main.cf

relayhost = 192.168.56.65

(configure the IP address of the nagios server at relay network field)

--> restart the postfix

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