# Experiment 9: Continuous Monitoring using Nagios on linux

## Step 1 – Install Prerequisites

sudo apt-get update  
sudo apt-get install -y wget build-essential unzip openssl libssl-dev apache2 php libapache2-mod-php php-gd libgd-dev

## Step 2 – Create Nagios User and Groups

sudo adduser nagios  
sudo groupadd nagcmd  
sudo usermod -a -G nagcmd nagios  
sudo usermod -a -G nagcmd www-data

## Step 3 – Install Nagios Core

cd /opt/  
sudo wget https://assets.nagios.com/downloads/nagioscore/releases/nagios-4.4.3.tar.gz  
sudo tar xzf nagios-4.4.3.tar.gz  
cd nagios-4.4.3  
  
sudo ./configure --with-command-group=nagcmd  
sudo make all  
sudo make install  
sudo make install-init  
sudo make install-daemoninit  
sudo make install-config  
sudo make install-commandmode  
sudo make install-exfoliation  
  
sudo cp -R contrib/eventhandlers/ /usr/local/nagios/libexec/  
sudo chown -R nagios:nagios /usr/local/nagios/libexec/eventhandlers

## Step 4 – Configure Apache Authentication

sudo nano /etc/apache2/conf-available/nagios.conf

Paste the following inside:

ScriptAlias /nagios/cgi-bin "/usr/local/nagios/sbin"  
<Directory "/usr/local/nagios/sbin">  
 Options ExecCGI  
 AllowOverride None  
 Order allow,deny  
 Allow from all  
 AuthName "Restricted Area"  
 AuthType Basic  
 AuthUserFile /usr/local/nagios/etc/htpasswd.users  
 Require valid-user  
</Directory>  
  
Alias /nagios "/usr/local/nagios/share"  
<Directory "/usr/local/nagios/share">  
 Options None  
 AllowOverride None  
 Order allow,deny  
 Allow from all  
 AuthName "Restricted Area"  
 AuthType Basic  
 AuthUserFile /usr/local/nagios/etc/htpasswd.users  
 Require valid-user  
</Directory>

## Step 5 – Create Nagios Web Login

sudo htpasswd -c /usr/local/nagios/etc/htpasswd.users nagiosadmin  
sudo a2enconf nagios  
sudo a2enmod cgi rewrite  
sudo systemctl restart apache2

## Step 6 – Install Nagios Plugins

cd /opt  
sudo wget http://www.nagios-plugins.org/download/nagios-plugins-2.2.1.tar.gz  
sudo tar xzf nagios-plugins-2.2.1.tar.gz  
cd nagios-plugins-2.2.1  
  
sudo ./configure --with-nagios-user=nagios --with-nagios-group=nagios --with-openssl  
sudo make  
sudo make install

## Step 7 – Verify

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

**if permission denied (/usr/local/nagios/bin/nagios: Permission denied**)

**follow below command:**

ls -l /usr/local/nagios/bin/nagios

sudo chmod +x /usr/local/nagios/bin/nagios

sudo chown nagios:nagcmd /usr/local/nagios/bin/nagios

**Now verify Nagios configuration again**

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

## Step 8 and Start Nagios

sudo service nagios start  
sudo systemctl enable nagios

## Step 9 – Access Nagios Web Interface

Open browser and go to: http://127.0.0.1/nagios/  
Username: nagiosadmin  
Password: 123456