```
Install OMD (Debian/Ubuntu) as of (06/01/2020)

Server:-

Download & Install check_mk raw:-

ping google.com
sudo apt update
sudo apt upgrade
sudo apt install ifupdown net-tools vim htop mtr arping gdebi-core wget traceroute snmpd telnet dsh -y

wget https://checkmk.com/support/1.6.0p7/check-mk-raw-1.6.0p7_0.bionic_amd64.deb

// (always get the latest stable version from the website:- https://checkmk.com/download.php) //


sudo gdebi check-mk-raw-1.6.0p7_0.bionic_amd64.deb
sudo omd create nmssite1   // This omd command will provide the URL, username and password
sudo omd start nmssite1


// Firewall Entry if you have any to secure the server //
iptables -A INPUT -p tcp --dport 6556 -s X.X.X.X -j ACCEPT
iptables -A INPUT -p tcp --dport 6556 -j DROP

 // Web Interface //
Access the web interface at the provided URL then:

http://172.16.108.xx/nmssite1

Change Admin password:
• On the Left WATO menu choose ‘Users’
• Choose the pencil ‘Properties’ icon beside the cmkadmin user
• Enter a new password under the authentication section
• Click ‘Save’
```

```
 // Install the Agent on a Server //
To check a server install the agent e.g.

#ttp://172.16.108.xx@mssite1/check_mk/agents/

sudo apt install check-mk-agent xinetd      // you would get the older version


vim /etc/xinetd.d/check_mk

service check_mk
{
        type            = UNLISTED
        port            = 6556
        socket_type     = stream
        protocol        = tcp
        wait            = no
        user            = root
        server          = /usr/bin/check_mk_agent

        # configure the IP address(es) of your Nagios server here:
        only_from       = 127.0.0.1 172.16.108.0/24
        log_on_success =

        disable         = no
}


// Then restart xinetd: //

systemctl restart xinetd
netstat -tulp | grep 6556
```

```
// Go back to the Check_mk monitoring server and from the WATO menu choose ( Hosts > Create ) //

Add the server name and IP address and choose '(Save & Test)'.

// You can test that check_mk agent is responding using telnet from the monitoring server e.g. //

sudo telnet 172.16.108.xx 6556


https://www.cybrary.it/0p3n/basics-check_mk-monitoring-system/


#The services can be grouped (e.g. by type, functions or services).
#– WATO → Host & Service Groups → Service groups (if in Host groups)
# → (1.2.4 or early systems: Service Groups): – New service group:
# Or – Select to the group! → Properties:
#- Name: Name of group – Alias: Alias of group
#nm– Save – X Changes → Activate Changes!
#– WATO → Host & Service Parameters → Grouping → Assignment of services to service groups:
#– Create rule in folder: Or – To select a rule! → Edit this rule: – Explicit hosts: Select,
# and enter names of hosts! – Services: Select, and enter names of services!
# – Assignment of services to service groups: Select to the service groups!
# – Save – X Changes → Activate Changes!

#The created service groups are in the View → Service Groups menu.
```

OBSERVIUM-LAB

```
sudo netstat -tulpn
sudo systemctl restart apache2

sudo vim /etc/apache2/sites-enabled/000-
default.conf    // change port 80 to 8080
sudo vim /etc/apache2/
ports.conf                          // change port 80 to
8080 and add port 8081

# If you just change the port or add more ports here,
you will likely also
# have to change the VirtualHost statement in
# /etc/apache2/sites-enabled/000-default.conf

Listen 8080
Listen 8081

<IfModule ssl_module>
        Listen 433
</IfModule>

<IfModule mod_gnutls.c>
        Listen 433
</IfModule>

# vim: syntax=apache ts=4 sw=4 sts=4 sr noet




sudo systemctl restart apache2
```

```
netstat -tulpn

sudo apt update
sudo apt install libapache2-mod-php php-cli php-mysql
php-mysqli php-gd php-json php-pear \
snmp fping mysql-server mysql-client python-mysqldb
rrdtool subversion whois mtr-tiny \
ipmitool graphviz imagemagick apache2

// Set MySQL Password if asked after running above
command

mkdir -p /opt/observium && cd /opt
wget http://www.observium.org/observium-community-
latest.tar.gz
tar zxvf observium-community-latest.tar.gz

sudo mysql -u root -p       // Set the MySQL info as
follows;

mysql > CREATE DATABASE observium;
mysql > CREATE USER observiumadmin@localhost IDENTIFIED
BY 'bdnog11cox';
mysql > GRANT ALL PRIVILEGES ON observium.* TO
observiumadmin@localhost;
mysql > FLUSH PRIVILEGES;
mysql > exit;


cd /opt/observium
cp config.php.default config.php
sudo vim /opt/observium/config.php

$config['db_host'] = 'localhost';
$config['db_user'] = 'observiumadmin';
$config['db_pass'] = 'bdnog11cox';
```

```
$config['db_name'] = 'observium';


sudo ./discovery.php -u          // to initialize update
the database;


mkdir logs
mkdir rrd
chown www-data:www-data rrd

sudo vim /etc/apache2/sites-available/observium.conf

<VirtualHost *:8081>
    ServerAdmin webmaster@localhost
    DocumentRoot /opt/observium/html
    <FilesMatch \.php$>
      SetHandler application/x-httpd-php
    </FilesMatch>
    <Directory />
            Options FollowSymLinks
            AllowOverride None
    </Directory>
    <Directory /opt/observium/html/>
            DirectoryIndex index.php
            Options Indexes FollowSymLinks MultiViews
            AllowOverride All
            Require all granted
    </Directory>
    ErrorLog  ${APACHE_LOG_DIR}/observium_error.log
    LogLevel warn
    CustomLog  ${APACHE_LOG_DIR}/observium_access.log
combined
    ServerSignature On
</VirtualHost>
```

```
sudo systemctl restart apache2

/etc/init.d/apache2 restart

sudo a2dismod mpm_event
sudo a2enmod mpm_prefork
sudo a2enmod rewrite
a2ensite observium.conf
sudo systemctl restart apache2


sudo ./adduser.php admin bdnog11cox 10

sudo vim /etc/cron.d/observium

# Run a complete discovery of all devices once every 6
hours
33  */6   * * *   root    /opt/observium/discovery.php -
h all >> /dev/null 2>&1

# Run automated discovery of newly added devices every
5 minutes
*/5 *     * * *   root    /opt/observium/discovery.php -
h new >> /dev/null 2>&1

# Run multithreaded poller wrapper every 5 minutes
*/5 *     * * *   root    /opt/observium/poller-
wrapper.py >> /dev/null 2>&1

# Run housekeeping script daily for syslog, eventlog
and alert log
13 5 * * * root /opt/observium/housekeeping.php -ysel
>> /dev/null 2>&1

# Run housekeeping script daily for rrds, ports,
```

```
orphaned entries in the database and performance data
47 4 * * * root /opt/observium/housekeeping.php -yrptb
>> /dev/null 2>&1



sudo vim includes/defaults.inc.php                // line
485 ... remove map
$config['frontpage']['order']           =
array('status_summary', 'device_status_boxes',
'device_status', 'eventlog');


// SNMP Configuration //

cd /etc/snmp/
cp snmpd.conf snmpd.conf.orig
echo "" > snmpd.conf

sudo vim snmpd.conf

com2sec local     localhost           public
com2sec mynetwork 172.16.108.0/24     public
com2sec mynetwork 172.16.208.0/24     public
group MyRWGroup v1         local
group MyRWGroup v2c        local
group MyROGroup v1         mynetwork
group MyROGroup v2c        mynetwork
view all    included  .1    80
access MyROGroup ""      any       noauth    exact
all    none   none
access MyRWGroup ""      any       noauth    exact
all    all    none
syslocation COXBAZAR
syscontact omnitechone@gmail.com
extend .1.3.6.1.4.1.2021.7890.1 distro /usr/bin/distro
```

```
cp observium/scripts/distro /usr/bin/distro
sudo /etc/init.d/snmpd restart

sudo snmpwalk -v 2c -c public 127.0.0.1


sudo vim /etc/hosts          // make host entry, also
you can local unbound dns

172.16.108.70  bdnog11linux00

ping bdnog11linux00
cd /opt/observium


sudo ./add_device.php bdnog11linux00 public v2c
sudo ./discovery.php -h bdnog11linux00
sudo ./poller.php -h bdnog11linux00

sudo ./discovery.php -h bdnog11linux00
sudo ./poller.php -h bdnog11linux00


cd scripts/
scp -P 1122 distro root@172.16.108.71:/usr/
bin/              // For a remote host
```