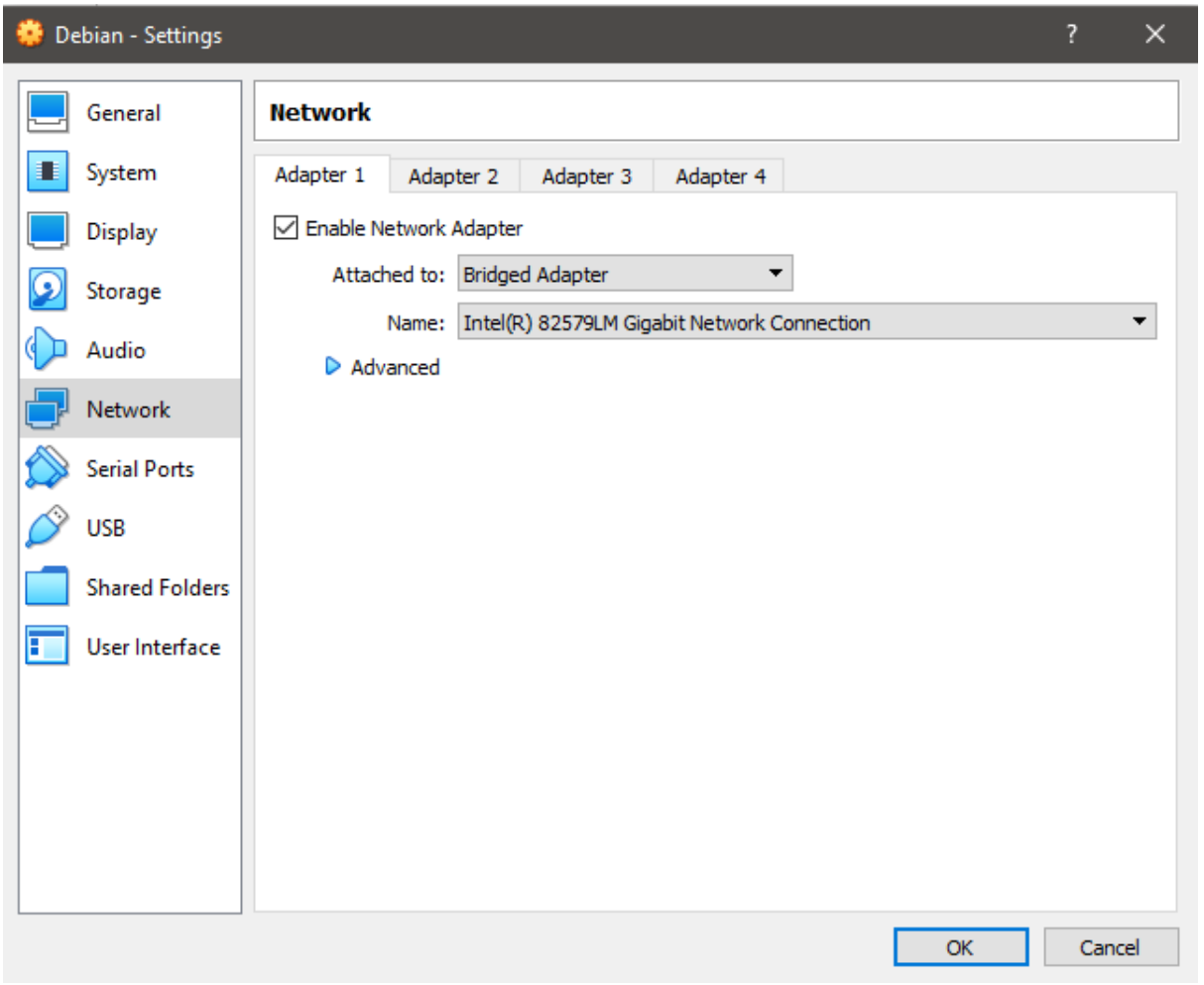
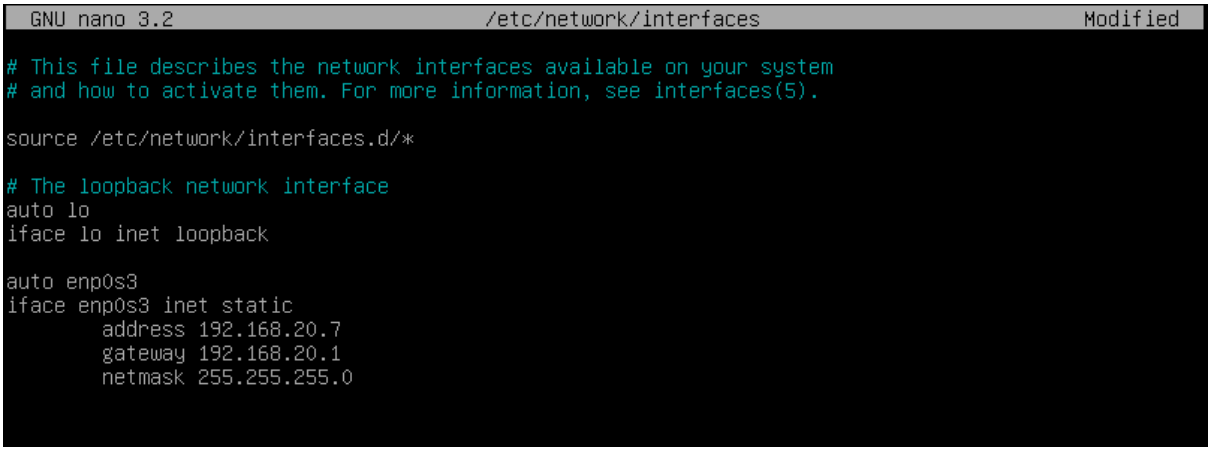
1. Kita konfigurasi virtual machine terlebih dahulu, disini pakai bridge kalau komputer arahkan ke “Realtek”



Gambar 1: Konfigurasi Interface

2. Setelah itu kita konfigurasi ip addressnya, disini saya setting static menjadi ip “**192.168.20.7”**



Gambar 2: Konfigurasi IP Address

3. Lalu kita insert repository sesuai versinya bisa dilihat dengan cara “**cat /etc/debian_version**”

```
root@alphacntauri:~# cat /etc/debian_version
10.5
root@alphacntauri:~# cat /etc/apt/sources.list
#

# deb cdrom:[Debian GNU/Linux 10.5.0 _Buster_ - Official amd64 DVD Binary-1 20200801-11:35]/ buster
contrib main

deb cdrom:[Debian GNU/Linux 10.5.0 _Buster_ - Official amd64 DVD Binary-1 20200801-11:35]/ buster co
ntrib main

# Line commented out by installer because it failed to verify:
#deb http://security.debian.org/debian-security buster/updates main contrib
# Line commented out by installer because it failed to verify:
#deb-src http://security.debian.org/debian-security buster/updates main contrib

# buster-updates, previously known as 'volatile'
# A network mirror was not selected during install.  The following entries
# are provided as examples, but you should amend them as appropriate
# for your mirror of choice.
#
# deb http://deb.debian.org/debian/ buster-updates main contrib
# deb-src http://deb.debian.org/debian/ buster-updates main contrib

deb http://kartolo.sby.datautama.net.id/debian/ buster main contrib non-free
deb http://kartolo.sby.datautama.net.id/debian/ buster-updates main contrib non-free
deb http://kartolo.sby.datautama.net.id/debian-security/ buster/updates main contrib non-free
root@alphacntauri:~# _
```

Gambar 3: Version debian & Repository

4. Next selanjutnya kita update repository dulu

```
root@alphacntauri:~# apt update -y
Ign:1 cdrom://[Debian GNU/Linux 10.5.0 _Buster_ - Official amd64 DVD Binary-1 20200801-11:35] buster
 InRelease
Err:2 cdrom://[Debian GNU/Linux 10.5.0 _Buster_ - Official amd64 DVD Binary-1 20200801-11:35] buster
 Release
  Please use apt-cdrom to make this CD-ROM recognized by APT. apt-get update cannot be used to add n
ew CD-ROMs
Hit:3 http://kartolo.sby.datautama.net.id/debian buster InRelease
Hit:4 http://kartolo.sby.datautama.net.id/debian buster-updates InRelease
Hit:5 http://kartolo.sby.datautama.net.id/debian-security buster/updates InRelease
Ign:6 https://pkg.jenkins.io/debian-stable binary/ InRelease
Hit:7 https://pkg.jenkins.io/debian-stable binary/ Release
Hit:8 http://ftp.au.debian.org/debian buster InRelease
Ign:9 http://download.webmin.com/download/repository sarge InRelease
Hit:11 http://download.webmin.com/download/repository sarge Release
Reading package lists... Done
E: The repository 'cdrom://[Debian GNU/Linux 10.5.0 _Buster_ - Official amd64 DVD Binary-1 20200801-
11:35] buster Release' does not have a Release file.
N: Updating from such a repository can't be done securely, and is therefore disabled by default.
N: See apt-secure(8) manpage for repository creation and user configuration details.
root@alphacntauri:~#
```

Gambar 4: Update repository

5. Konfigurasi DNS Server

```
  [1/3]                                    smk.int                                    Modified

;
; BIND data file for local loopback interface
;
$TTL    604800
@       IN      SOA     smk13403.co.id. root.smk13403.co.id. (
                              2         ; Serial
                         604800         ; Refresh
                          86400         ; Retry
                        2419200         ; Expire
                         604800 )       ; Negative Cache TTL
;
@               IN      NS      smk13403.co.id.
@               IN      A       192.168.1.136
www             IN      A       192.168.1.136
mail            IN      A       192.168.1.136
cacti           IN      A       192.168.1.136
cctv            IN      A       192.168.1.8
voip            IN      A       192.168.1.7_
smk13403.co.id  IN      MX 10   mail
```

Gambar 5: Setting Forward Zone

```
  GNU nano 3.2                                    smk.rev

;
; BIND reverse data file for local loopback interface
;
$TTL    604800
@       IN      SOA     smk13403.co.id. root.smk13403.co.id. (
                              1         ; Serial
                         604800         ; Refresh
                          86400         ; Retry
                        2419200         ; Expire
                         604800 )       ; Negative Cache TTL
;
@       IN      NS      smk13403.co.id.
136     IN      PTR     www.smk13403.co.id.
136     IN      PTR     cacti.smk13403.co.id.
136     IN      PTR     mail.smk13403.co.id.
8       IN      PTR     cctv.smk13403.co.id.
7       IN      PTR     voip.smk13403.co.id.
```

Gambar 5.1: Setting Rervese Zone

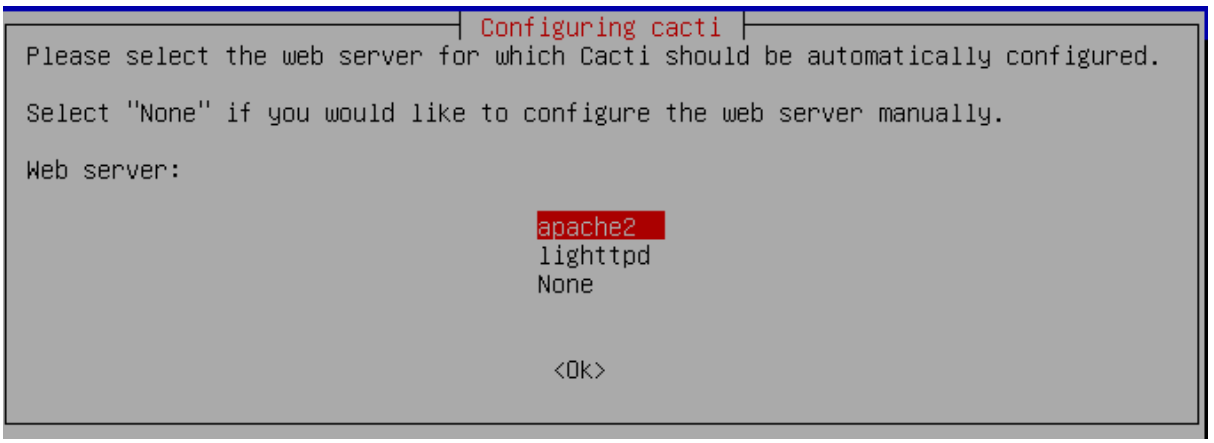
```
  GNU nano 3.2                                named.conf.local

zone "smk13403.co.id" {
        type master;
        file "/etc/bind/smk.int";
};

zone "1.168.192.in-addr.arpa" {
        type master;
        file "/etc/bind/smk.rev";
};
```

Gambar 5.2: Setting Local Zone

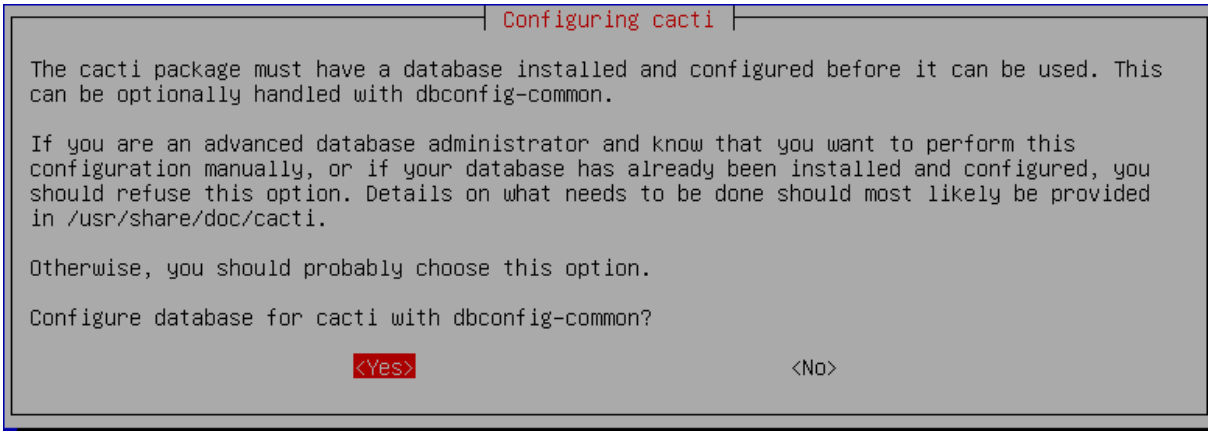
6. Setelah itu kita install cacti dengan command “apt install cacti snmp snmpd -y”

```
root@khairunisa:/etc/bind# apt install cacti snmp snmpd -y
```

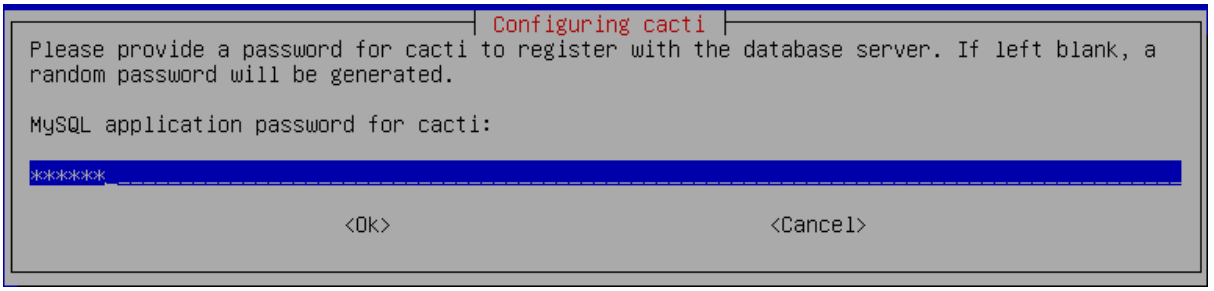
Gambar 6.1: Install Package



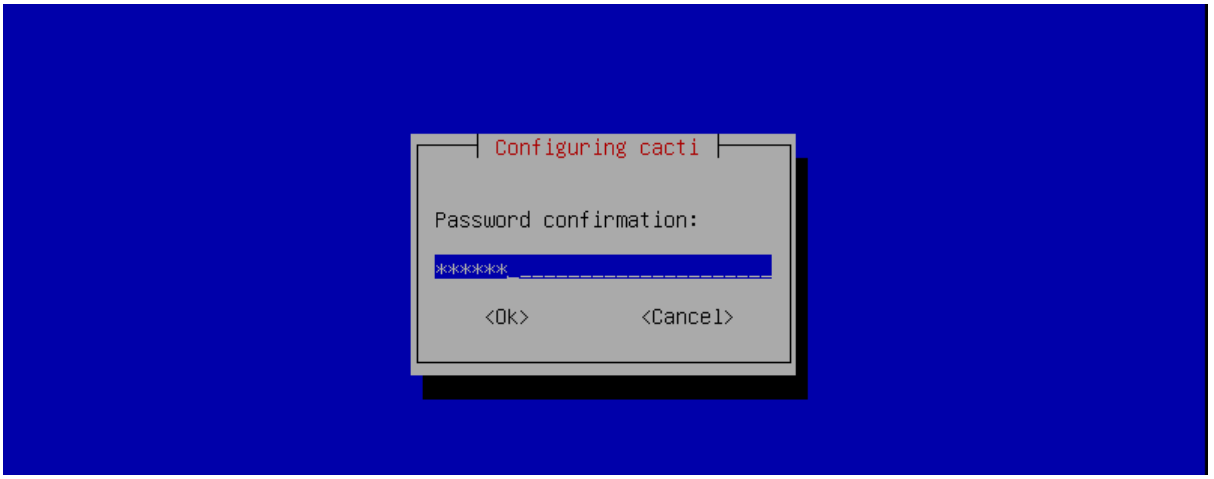
Gambar 6.2: Configure Webserver (apache2)



Gambar 6.3: Configure DBCONFIG



Gambar 6.4: Masukin Password (Bebas Apa aja)



Gambar 6.5: Rewrite password

7. Setelah itu konfigurasi file “snmpd.conf”

```
root@khairunisa:/etc/bind# cd /etc/snmp/
root@khairunisa:/etc/snmp# ls
snmp.conf  snmpd.conf
root@khairunisa:/etc/snmp# nano snmpd.conf
```

Gambar 7.1: Buka file snmpd.conf

```
  GNU nano 3.2                          /etc/snmp/snmpd.conf                          Modified

###############################################################################
#
# EXAMPLE.conf:
#   An example configuration file for configuring the Net-SNMP agent ('snmpd')
#   See the 'snmpd.conf(5)' man page for details
#
#  Some entries are deliberately commented out, and will need to be explicitly activated
#
###############################################################################
#
#  AGENT BEHAVIOUR
#

#  Listen for connections from the local system only
agentAddress  udp:192.168.1.136:131
#  Listen for connections on all interfaces (both IPv4 *and* IPv6)
#agentAddress udp:161,udp6:[::1]:161
```

Gambar 7.2: Masukan ip addres server kalian

```
  GNU nano 3.2                          /etc/snmp/snmpd.conf                          Modified


#  If you also change the usernames (which might be sensible),
#  then remember to update the other occurances in this example config file to match.



###############################################################################
#
#  ACCESS CONTROL
#

                                       #  system + hrSystem groups only
view   systemonly  included   .1.3.6.1.2.1.1
view   systemonly  included   .1.3.6.1.2.1.25.1


 rocommunity smk13403 192.168.1.136
                                       #  Full access from the local host
                                       #  Default access to basic system info
 rocommunity public  default    -V systemonly
                                       #  rocommunity6 is for IPv6
 rocommunity6 public  default   -V systemonly
```

Gambar 7.3: Masukan custom rocomunity server kalian

8. Lalu jalankan command “snmpwalk -v2c -c {namarocomunityserver} {ip_address}”

```
root@khairunisa:/etc/snmp# snmpwalk -v2c -c khairunisaserver 192.168.1.136
Timeout: No Response from 192.168.1.136
root@khairunisa:/etc/snmp#
```

Gambar 8: Runnin snmpwalk

9. Lalu buat vhost untuk cacti

```
root@khairunisa:/etc/apache2/sites-available# cp 000-default.conf cacti.conf
root@khairunisa:/etc/apache2/sites-available# nano cacti.conf _
```

Gambar 9.1: Copy file default to cacti configuration

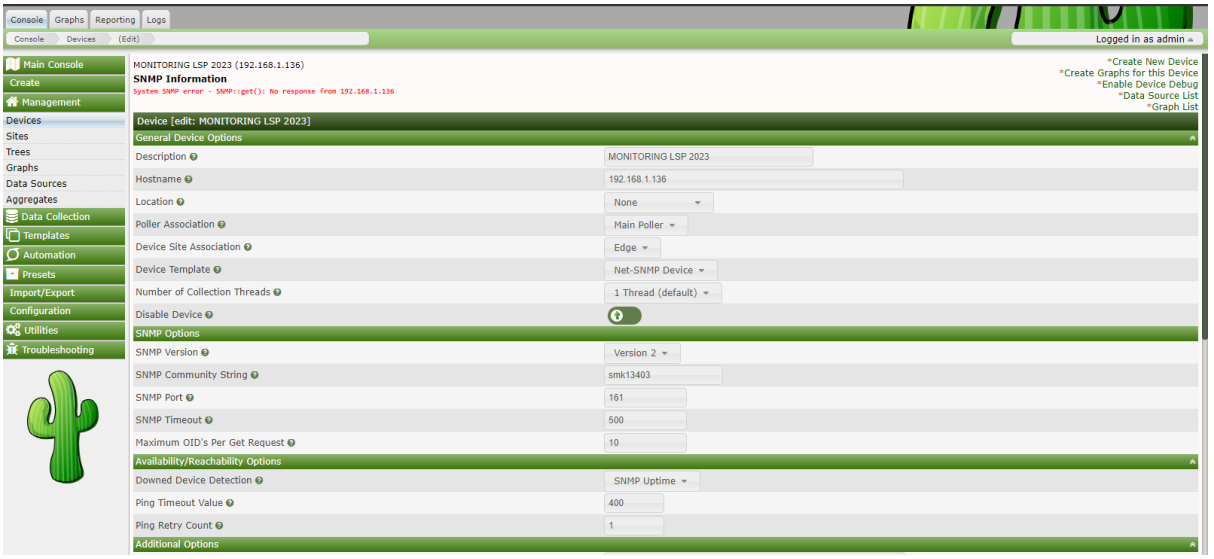
```
 GNU nano 3.2                          cacti.conf                          Modified

<VirtualHost *:80>
        # The ServerName directive sets the request scheme, hostname and port that
        # the server uses to identify itself. This is used when creating
        # redirection URLs. In the context of virtual hosts, the ServerName
        # specifies what hostname must appear in the request's Host: header to
        # match this virtual host. For the default virtual host (this file) this
        # value is not decisive as it is used as a last resort host regardless.
        # However, you must set it for any further virtual host explicitly.
        ServerName cacti.smk13403.co.id

        ServerAdmin webmaster@localhost
        DocumentRoot /usr/share/cacti/site_

        # Available loglevels: trace8, ..., trace1, debug, info, notice, warn,
        # error, crit, alert, emerg.
        # It is also possible to configure the loglevel for particular
        # modules, e.g.
        #LogLevel info ssl:warn

        ErrorLog ${APACHE_LOG_DIR}/error.log
        CustomLog ${APACHE_LOG_DIR}/access.log combined

        # For most configuration files from conf-available/, which are
        # enabled or disabled at a global level, it is possible to
        # include a line for only one particular virtual host. For example the
        # following line enables the CGI configuration for this host only
        # after it has been globally disabled with "a2disconf".
        #Include conf-available/serve-cgi-bin.conf
</VirtualHost>

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

Gambar 9.2: Configure VHOST

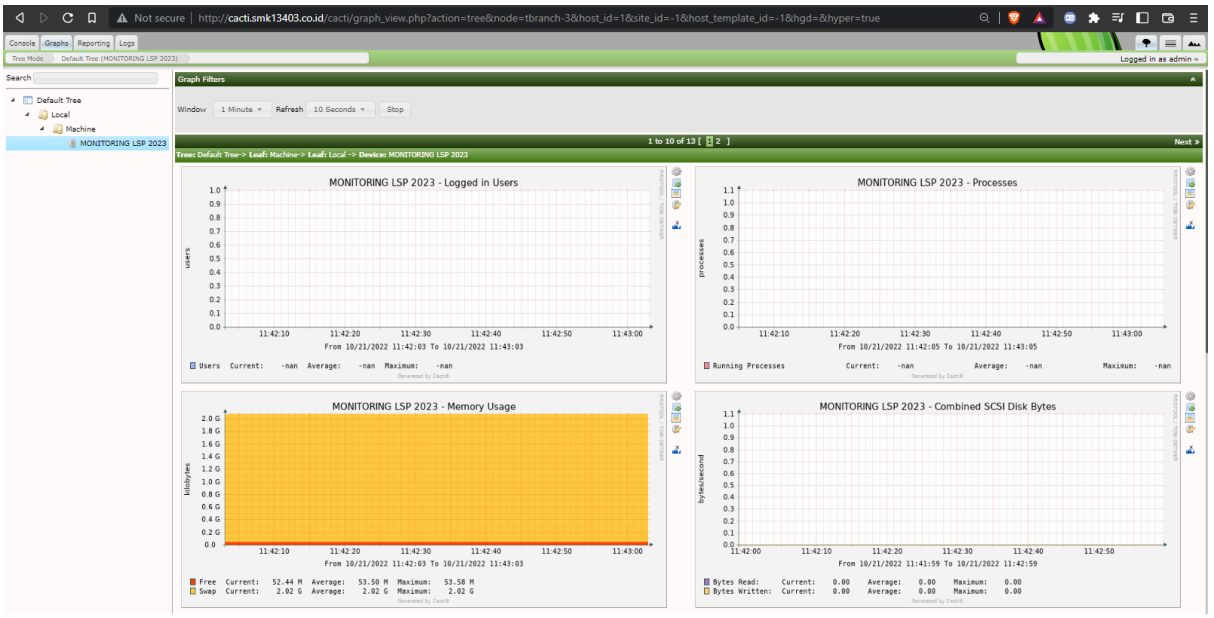
```
root@khairunisa:/etc/apache2/sites-available# a2ensite cacti.conf
Enabling site cacti.
To activate the new configuration, you need to run:
  systemctl reload apache2
root@khairunisa:/etc/apache2/sites-available# systemctl restart apache2
root@khairunisa:/etc/apache2/sites-available# _
```

Gambar 9.3: a2ensite

10. Testing di web, dengan user admin dan password sesuaikan yang tadi di config pas dbconfig-common
11. Konfigurasi monitoring



Gambar 11.1: Konfigurasi Device



Gambar 11.2: Monitorng Apply