

_Centreon, SNMP

Table of contents:

- [Centreon Server](#)
 - [Linux Host \(install SNMP/D\)](#)
 - [Back to the Centreon Server](#)
 - [Add a new Host](#)
-

Note

Centreon — это платформа мониторинга ИТ-инфраструктуры с открытым исходным кодом, которая позволяет отслеживать состояние и производительность сетевых устройств, серверов, приложений и других компонентов. Она собирает данные о доступности, производительности и событиях, предоставляя их в виде дашбордов, отчетов и оповещений. Centreon часто используется для централизованного мониторинга в сложных ИТ-экосистемах.

Centreon Server

- Идём на [Download Centreon | Open Source IT Infrastructure Monitoring Tool](#), и качаем архиви с *.ova image* внутри.

1. Select Your Need

_Centreon, SNMP

Appliances
For Quick Deployment

Packages
For Production Environment

Custom Platforms
For Advanced Environment

2. Pick Your Centreon Version

24.10

24.04

23.10

23.04

22.10

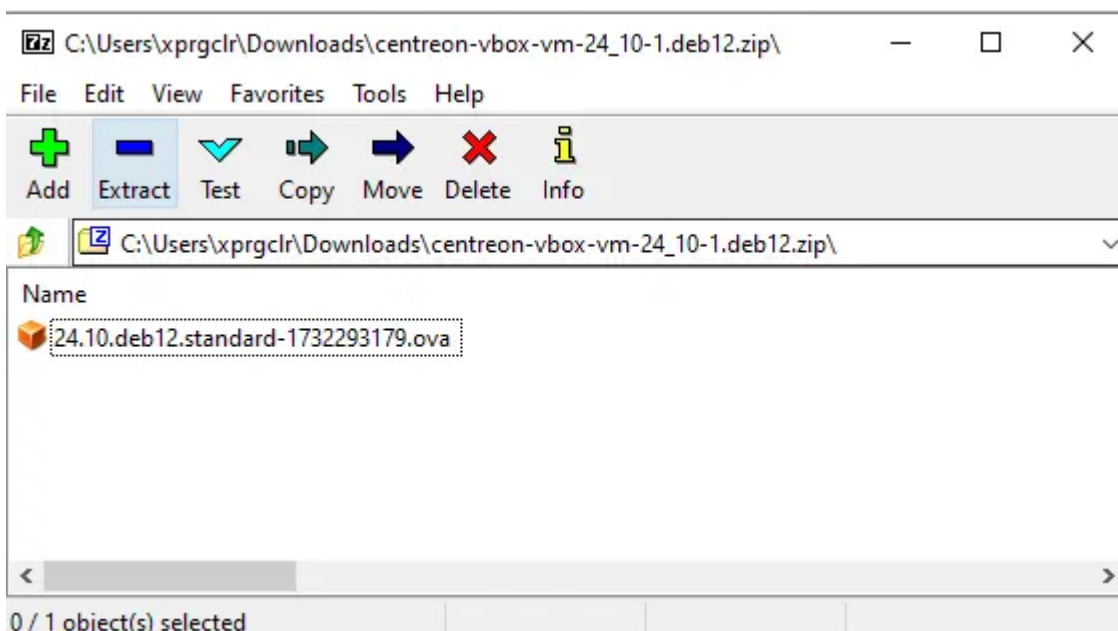
Older

3. Download Your Image

Release	Platform	Operating System	Date	MD5	Doc	Download
24.10	VirtualBox	deb 12	Dec. 06, 2024			Download
24.10	VirtualBox	alma 9	Dec. 06, 2024			Download

4. Start using Centreon

- форму не заполняем, жмакаем "Direct Download".
- скачиваем, распаковываем и импортируем в VirtualBox



- в настройках - "Bridged Adapter", можно добавить mem/cpu
- включаем машину, логинимся - Login: `root` password: `centreon`

```
export-i-51630a6d26d68bc7 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
_Centreon, SNMP

Last login: Tue Jan 21 12:42:28 UTC 2025 from 192.168.0.5 on pts/0
"Based on 'Debian GNU/Linux 12 (bookworm)'"

Please execute following instruction:

1. Define the timezone of the server (ex. Europe/London):
# timedatectl set-timezone Europe/London

2. Define the PHP timezone (ex. Europe/London) in file /etc/php.d/50-centreon.ini
# systemctl restart php8.2-fpm

3. Change the hostname of the server (ex. centreon-central):
# hostnamectl set-hostname centreon-central

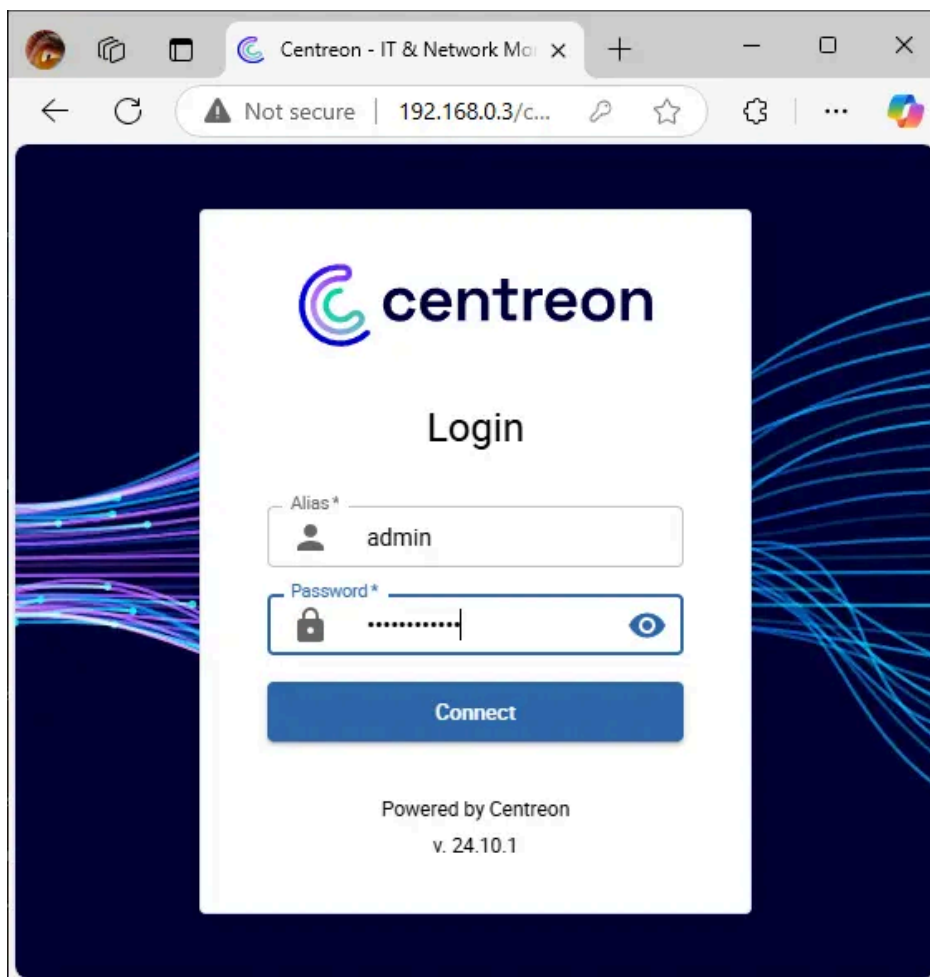
4. Update the Centreon database partitioning (mandatory):
# su - centreon
$ /bin/php /usr/share/centreon/cron/centreon-partitioning.php
$ exit

5. Restart Centreon services (mandatory):
# systemctl restart cbd centengine gorgoned

You can disable the CEIP program using Centreon official documentation.
To delete this message, delete the /etc/profile.d/centreon.sh file."

root@ip-10-1-154-78:~# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host noprefixroute
        valid_lft forever preferred_lft forever
2: enp0s17: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:12:dd:37 brd ff:ff:ff:ff:ff:ff
    inet 192.168.0.3/24 metric 1024 brd 192.168.0.255 scope global dynamic enp0s17
        valid_lft 6864sec preferred_lft 6864sec
    inet6 fe80::a00:27ff:fe12:dd37/64 scope link
        valid_lft forever preferred_lft forever
root@ip-10-1-154-78:~#
```

- по `ip a` смотрим ip адрес виртуалки и логинимся в браузере по этому адресу.
Login: `admin` , password: `Centreon!123`



- главный экран с видеогайдом на 6 секунд)


```
Centreon Server x Linux host + v Centreon, SNMP
GNU nano 3.2 snmpd.conf

#####
#
# 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 0.0.0.0
rocommunity kit23v default
# Listen for connections on all interfaces (both IPv4 *and* IPv6)
#agentAddress udp:161,udp6:[::1]:161

#####
#
# SNMPv3 AUTHENTICATION
#
#####
[ Read 196 lines ]
^G Get Help ^O Write Out ^W Where Is ^K Cut Text ^J Justify ^C Cur Pos M-U Undo M-A Mark Text
^X Exit ^R Read File ^N Replace ^U Uncut Text ^T To Spell ^_ Go To Line M-E Redo M-G Copy Text
```

- Можно, но не обязательно (в разделе SYSTEM INFORMATION SETUP):

```
sysLocation      SecretGarage
sysContact        kit23v@tptkaroche.com
sysName           MyDebianHost
```

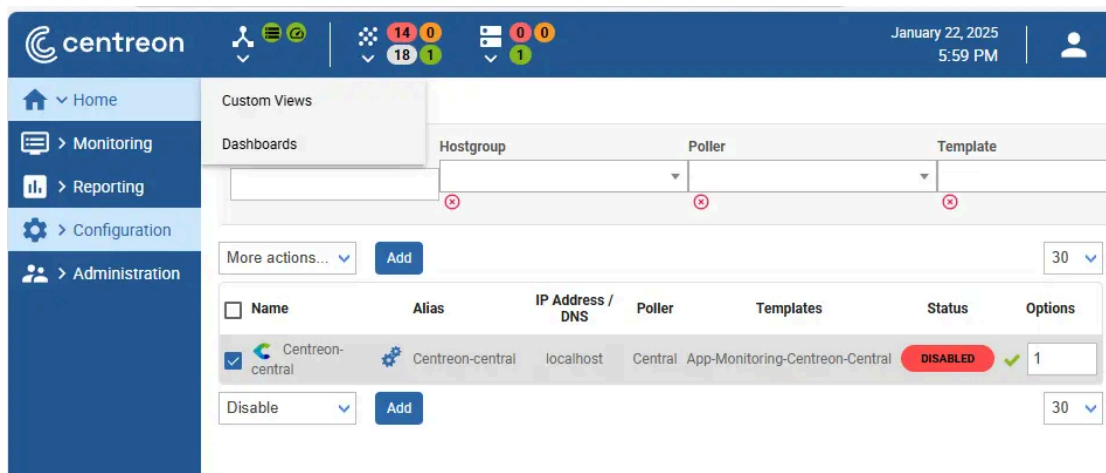
- Рестартим snmpd: `systemctl restart snmpd`
- Проверяем с хоста: `snmpwalk -v2c -c kit23v localhost`
- Точно так же, проверяем уже с centreon сервера: только вместо *localhost* указываем *ip адрес linux хоста*.

Если получаем длинный список данных, то значит всё настроено. (Не должно быть **Timeout: No Response from x.x.x.x**)

```
Centreon Server x Linux host + v
iso.3.6.1.2.1.88.1.4.3.1.3.6.95.115.110.109.112.100.95.108.105.110.107.68.111.119.110 = STRING: "_linkUpDown"
iso.3.6.1.2.1.88.1.4.3.1.3.6.95.115.110.109.112.100.95.108.105.110.107.85.112 = STRING: "_linkUpDown"
iso.3.6.1.2.1.88.1.4.3.1.3.6.95.115.110.109.112.100.95.109.116.101.84.114.105.103.103.101.114.70.97.105.108.117.114.101
= STRING: "_triggerFail"
iso.3.6.1.2.1.88.1.4.3.1.3.6.95.115.110.109.112.100.95.109.116.101.84.114.105.103.103.101.114.70.97.108.108.105.110.103
= STRING: "_triggerFire"
iso.3.6.1.2.1.88.1.4.3.1.3.6.95.115.110.109.112.100.95.109.116.101.84.114.105.103.103.101.114.70.105.114.101.100 = STRIN
G: "_triggerFire"
iso.3.6.1.2.1.88.1.4.3.1.3.6.95.115.110.109.112.100.95.109.116.101.84.114.105.103.103.101.114.82.105.115.105.110.103 = S
TRING: "_triggerFire"
iso.3.6.1.2.1.92.1.1.1.0 = Gauge32: 1000
iso.3.6.1.2.1.92.1.1.2.0 = Gauge32: 1440
iso.3.6.1.2.1.92.1.2.1.0 = Counter32: 1
iso.3.6.1.2.1.92.1.2.2.0 = Counter32: 0
iso.3.6.1.2.1.92.1.3.1.1.2.7.100.101.102.97.117.108.116.1 = Timeticks: (1) 0:00:00.01
iso.3.6.1.2.1.92.1.3.1.1.3.7.100.101.102.97.117.108.116.1 = Hex-STRING: 07 E9 01 16 13 0C 1F 00 2B 02 00
iso.3.6.1.2.1.92.1.3.1.1.4.7.100.101.102.97.117.108.116.1 = ""
iso.3.6.1.2.1.92.1.3.1.1.7.7.100.101.102.97.117.108.116.1 = ""
iso.3.6.1.2.1.92.1.3.1.1.8.7.100.101.102.97.117.108.116.1 = ""
iso.3.6.1.2.1.92.1.3.1.1.9.7.100.101.102.97.117.108.116.1 = OID: iso.3.6.1.6.3.1.1.5.1
iso.3.6.1.2.1.92.1.3.2.1.2.7.100.101.102.97.117.108.116.1.1 = OID: iso.3.6.1.2.1.1.3.0
iso.3.6.1.2.1.92.1.3.2.1.2.7.100.101.102.97.117.108.116.1.2 = OID: iso.3.6.1.6.3.18.1.3.0
iso.3.6.1.2.1.92.1.3.2.1.2.7.100.101.102.97.117.108.116.1.3 = OID: iso.3.6.1.6.3.1.1.4.3.0
iso.3.6.1.2.1.92.1.3.2.1.3.7.100.101.102.97.117.108.116.1.1 = INTEGER: 3
iso.3.6.1.2.1.92.1.3.2.1.3.7.100.101.102.97.117.108.116.1.2 = INTEGER: 5
iso.3.6.1.2.1.92.1.3.2.1.3.7.100.101.102.97.117.108.116.1.3 = INTEGER: 7
iso.3.6.1.2.1.92.1.3.2.1.6.7.100.101.102.97.117.108.116.1.1 = Timeticks: (1) 0:00:00.01
iso.3.6.1.2.1.92.1.3.2.1.9.7.100.101.102.97.117.108.116.1.2 = IpAddress: 192.168.0.221
iso.3.6.1.2.1.92.1.3.2.1.10.7.100.101.102.97.117.108.116.1.3 = OID: iso.3.6.1.4.1.8072.3.2.10
root@ip-10-1-154-78:~#
```

Back to the Centreon Server

- В меню "Configuration->Hosts->Hosts" можем увидеть добавленные хосты. Изначально там только сам Centreon server, тушим его чтоб не отвлекал (выделяем галочку и выбираем *Disable*)



- Добавляем наш Linux хост кнопкой "Add"

Name - отображаемое имя в списке хостов

Address - #ip адрес линукс хоста

SNMP Community & Version - kit23v

Templates - OS-Linux-SNMP-custom / OS-Linux-SNMP

Create Services linked to the Template too - Yes

Check Command - base_host_alive

Check Period - 24x7

Max Check Attempts - 3

Normal Check Interval - 1

Retry Check Interval - 3

centreon

Home

Monitoring

Reporting

Configuration

Administration

Host Configuration Notification Relations Data Processing Host Extended Infos

Save Reset

Add a Host

Host basic information

Name * DebianHost

Alias

Address * 192.168.0.221 Resolve

SNMP Community & Version kit23v 2c

Monitoring server Central

Timezone Europe/Tallinn

Templates

A host or host template can have several templates. See help for more details.

+ Add a new entry

OS-Linux-SNMP-custom

Create Services linked to the Template too ☒ Yes ☐ No

Host check options

Check Command base_host_alive

Args

Custom macros

+ Add a new entry

Template inheritance

Command inheritance

Name SNMPEXTRAOPTIONS Value Password

Scheduling options

Check Period 24x7

Max Check Attempts 3

Normal Check Interval 1 * 60 seconds

Retry Check Interval 3 * 60 seconds

Active Checks Enabled ☐ Yes ☐ No ☒ Default

Passive Checks Enabled ☐ Yes ☐ No ☒ Default

Save Reset

- В "Configuration->Pollers" жмакаем "Export configuration", выбираем "Pollers: Central" и ставим первые 4 галочки.
- Скорее всего у нас нет прав поэтому будет следующая ошибка:

```
Preparing environment... OK
Generating files... NOK (Exception received : Cannot open file
/var/cache/centreon/config/vmware/1/centreon_vmware.json [file:
/usr/share/centreon/www/class/config-generate/abstract/objectJSON.class.php] [line:
113] )
Aborted.
```

- Тогда заходим на сервер, меняем владельца и прописываем разрешения (будет ругаться, но команду "схавает"):

```
chmod -R 775 /var/cache/centreon
chown -R centreon:centreon
```



```
Centreon Server  x  Linux host  +  Centreon, SNMP

root@ip-10-1-154-78:~# sudo chmod -R 775 /var/cache/centreon
/etc/sudoers.d/centreon:57:28: expected a fully-qualified path name
CENTREON ALL = NOPASSWD: systemctl restart centreon_vmmware
~#
/etc/sudoers.d/centreon:58:28: expected a fully-qualified path name
CENTREON ALL = NOPASSWD: systemctl start centreon_vmmware
~#
/etc/sudoers.d/centreon:59:28: expected a fully-qualified path name
CENTREON ALL = NOPASSWD: systemctl restart centreon_vmmware.service
~#
/etc/sudoers.d/centreon:60:28: expected a fully-qualified path name
CENTREON ALL = NOPASSWD: systemctl start centreon_vmmware.service
~#
root@ip-10-1-154-78:~# sudo chown -R centreon:centreon
/etc/sudoers.d/centreon:57:28: expected a fully-qualified path name
CENTREON ALL = NOPASSWD: systemctl restart centreon_vmmware
~#
/etc/sudoers.d/centreon:58:28: expected a fully-qualified path name
CENTREON ALL = NOPASSWD: systemctl start centreon_vmmware
~#
/etc/sudoers.d/centreon:59:28: expected a fully-qualified path name
CENTREON ALL = NOPASSWD: systemctl restart centreon_vmmware.service
~#
/etc/sudoers.d/centreon:60:28: expected a fully-qualified path name
CENTREON ALL = NOPASSWD: systemctl start centreon_vmmware.service
~#
chown: missing operand after 'centreon:centreon'
Try 'chown --help' for more information.
root@ip-10-1-154-78:~#
```

- Теперь всё должно быть ок:

Configuration > Pollers > Export configuration

| Configuration Files Export

Polling instances

ⓘ Pollers *

Actions

- ☒ Generate Configuration Files
- ☒ Run monitoring engine debug (-v)
- ☒ Move Export Files
- ☒ Restart Monitoring Engine Method:
- ☐ Post generation command

| Console

Progress (100%)

Preparing environment... **OK**

Generating files... **OK**

Moving files... **OK**

Restarting engine... **OK**

[.] **Central**

Configuration mechanism used: legacy

Reading main configuration file '/var/cache/centreon/config/engine/1/centengine.DEBUG'.

Reading resource file '/var/cache/centreon/config/engine/1/resource.cfg'

Warning Notifier 'DebianHost' has no notification time period defined!

Warning Notifier 'Swap' has no notification time period defined!

Warning Notifier 'Memory' has no notification time period defined!

Warning Notifier 'Load' has no notification time period defined!

Warning Notifier 'Cpu' has no notification time period defined!

Warning Notifier 'Ping' has no notification time period defined!

Checking global event handlers...

Checking obsessive compulsive processor commands...

Checked 6 commands.

Checked 2 connectors.

Checked 0 contacts.

Checked 0 host dependencies.

Checked 0 host escalations.

Checked 0 host groups.

Checked 1 hosts.

Checked 0 service dependencies.

Checked 0 service escalations.

Checked 0 service groups.

Checked 5 services.

Checked 1 time periods.

Total Warnings: 6

Total Errors: 0

- Идем в "Monitoring->Resource Status" и в фильтрах выбираем "All":

Monitoring > Resources Status ? _Centreon, SNMP

Search [X] [Filter] [Help] [Settings] [All]

Status	Resource	Parent	G	Duration	Last check	Information	Tries
Pending	S Swap	DebianHost					1/3 (H)
Pending	S Memory	DebianHost					1/3 (H)
Pending	S Load	DebianHost					1/3 (H)
Pending	S Cpu	DebianHost					1/3 (H)
Pending	S Ping	DebianHost					1/3 (H)
OK	DebianHost			1m 37s	37s	OK - 192.168...	1/3 (H)

- Через пару минут все Pendingi должны смениться на OK

centreon Pollers Services Hosts January 22, 2025 7:31 PM

Monitoring > Resources Status ?

Search [X] [Filter] [Help] [Settings] [All]

Up DebianHost

Details Services Timeline Graph Notification

1 day 7 days 31 days From: 01/22/2025 11:18 AM To: 01/22/2025 8:08 PM Display events

Cpu graph on DebianHost

25% 20% 15% 10% 5% 0%

12:00 PM 1:00 PM 2:00 PM 3:00 PM 4:00 PM 5:00 PM 6:00 PM 7:00 PM 8:00 PM

Average Cpu Usage Min: 1.2 Max: 29.31 Avg: 11.75

Cpu Min: 1.2 Max: 29.31 Avg: 11.75

Load graph on DebianHost

0.5 0.4 0.3 0.2 0.1 0

12:00 PM 1:00 PM 2:00 PM 3:00 PM 4:00 PM 5:00 PM 6:00 PM 7:00 PM 8:00 PM

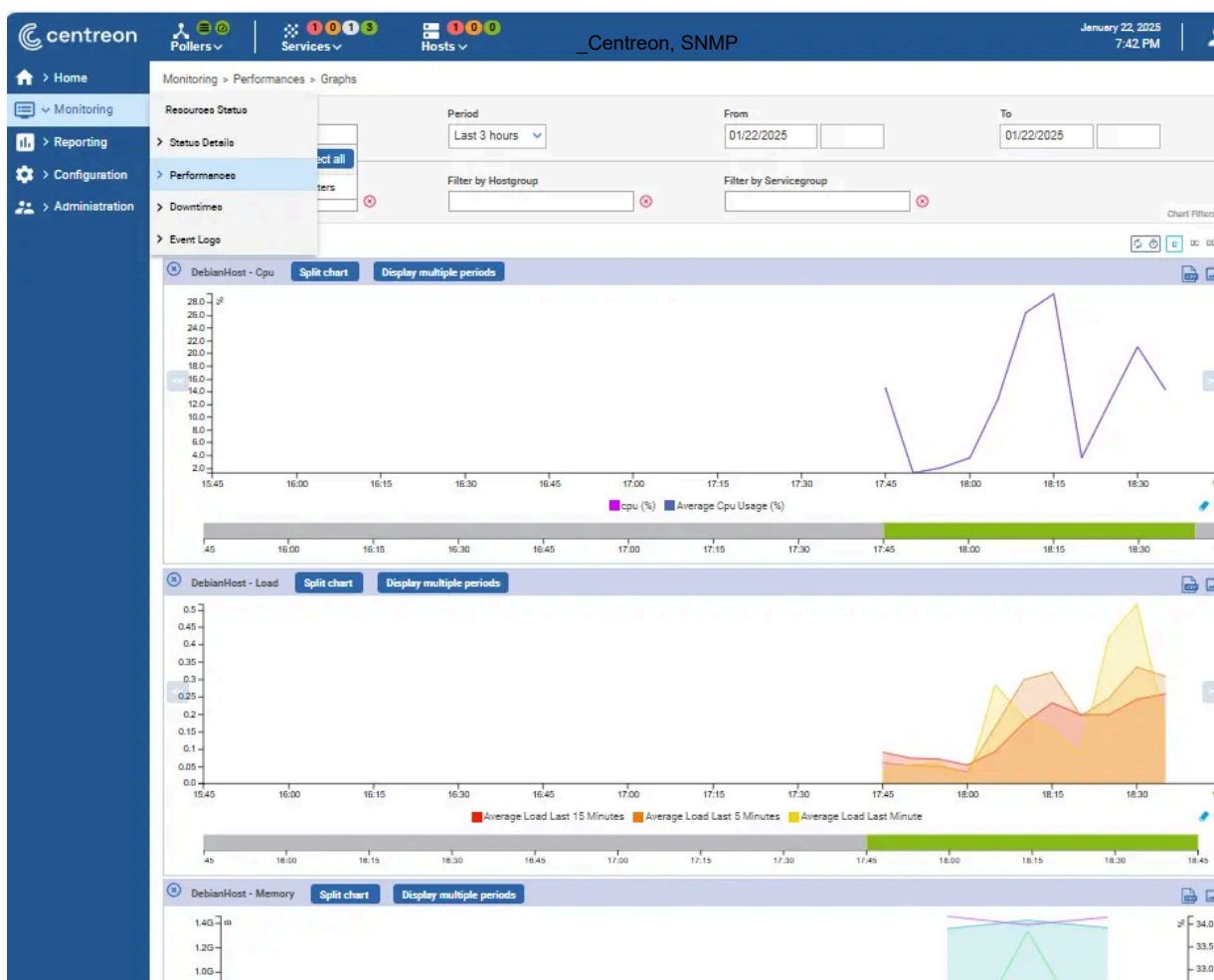
Average Load Last Minute Average Load Last 5 Minutes Average Load Last 15 Minutes

Memory graph on DebianHost

1.3 GB 1.12 GB 93.67 MB

30 25

- Можно в "Monitoring->Performances->Graphs" посмотреть более удобные полноэкранные графики, для этого через выпадающее меню "Charts", добавляем нужные нам элементы:



Add a new Host

- Добавляем еще один Linux хост и повторяем процедуры (либо клонируем, но не забываем сгенерировать новый MAC-адрес на клоне):
 - на хосте настроенный snmpd с *rocommunity*
 - на centreon добавленный хост для мониторинга
 - при добавлении/изменении конфигураций хостов, всегда нужно делать **"Export pool"** !

Done

- More links:
 - <https://docs.centreon.com/docs/installation/installation-of-a-central-server/using-virtual-machines/>
 - <https://docs.centreon.com/docs/getting-started/first-supervision/>