Instalación del Apliance LibreNMS

Paso 1 – Descarga del appliance LibreNMS

1.1 Ingresar al sitio web de descarga del appliance LibreNMS

https://www.librenms.org/

1.2 Clic en Downloads

DOWNLOADS

READY TO INSTALL LIBRENMS FOR YOUR NETWORK?

LibreNMS Documentation

- LibreNMS Docs
- LibreNMS Installation Guides
- GitHub LibreNMS

Centos / Ubuntu

- Support for both Apache and Nginx Web Servers
- Installation Guide

Virtual Machines

- LibreNMS Virtual Machines: Documentation
- LibreNMS: OVA Images

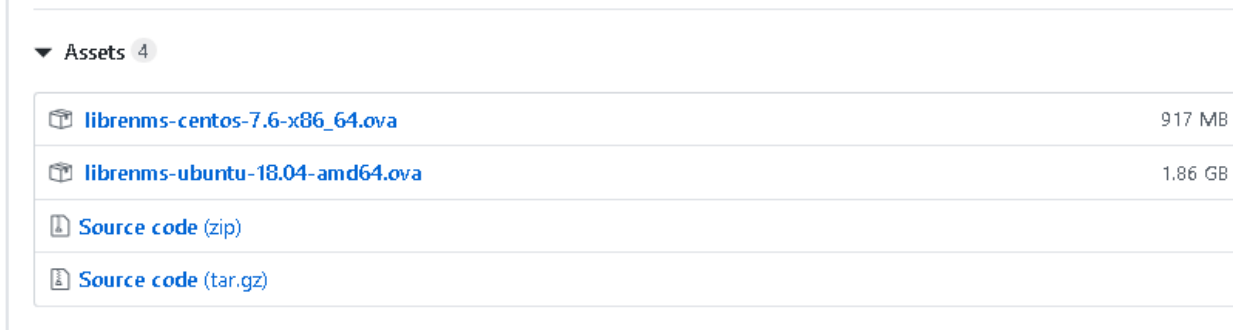**Docker Images**

- Docker image documenation located on: GitHub LibreNMS/Docker
- LibreNMS on: dockerhub
- LibreNMS on: QUAY

1.3 Seleccionar la versión OVA
Dar clic en OVA images

Nota: se sugiere Ubuntu 18.04

▼ Assets 4	
🗍 librenms-centos-7.6-x86_64.ova	917 MB
🗍 librenms-ubuntu-18.04-amd64.ova	1.86 GB
🗍 Source code (zip)	
🗍 Source code (tar.gz)	

Paso 2 – Asignación de contraseñas a las cuentas de usuario root y librenms

La información de los accesos para la máquina virtual en formato OVA se encuentra en:
https://docs.librenms.org/Installation/Images/

2.1 Ingresar como usuario LibreNMS

Accesos creados en la máquina virtual:
- SSH: librenms / CDne3fwdfds (en versiones previas: CIne3fwdfds)
- Cuenta de MySQL/MariaDB: librenms / D42nf23rewD
- WebUI: librenms / D32fwefwef
- root / "Hay que definir contraseña para ingresar"

2.2 Asignar contraseña a usuario root

```
librenms@librenms:~$ sudo passwd root
[sudo] password for librenms: CDne3fwdfds
Enter new UNIX password: 123456
Retype new UNIX password: 123456
passwd: password updated successfully
```

2.3 Verificar la contraseña creada

```
librenms@librenms:~$ su root -l
Password: 123456
```

2.4 Asignar contraseña a usuario librenms

```
root@librenms:~# passwd librenms
Enter new UNIX password: 123456
Retype new UNIX password: 123456
passwd: password updated successfully
```

Paso 3 – Configurar interfaz de red con los parámetros IPv4 de la red

Si es para la versión 16.04
3.1 Verificar las interfaces existentes

```
root@librenms:~# ifconfig

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          inet6 addr: ::1/128 Scope:Host
          UP LOOPBACK RUNNING  MTU:65536  Metric:1
          RX packets:50747 errors:0 dropped:0 overruns:0 frame:0
          TX packets:50747 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1
          RX bytes:7978901 (7.9 MB)  TX bytes:7978901 (7.9 MB)
```

3.2 Visualizar identificador de la interfaz (opcional si solo aparece loopback)

```
root@librenms:~# networkctl

IDX LINK            TYPE            OPERATIONAL SETUP
  1 lo              loopback        n/a         n/a
  2 ens33           ether           n/a         n/a

2 links listed.
```

3.3 Configurar la interfaz de red

Nota: la letra Y corresponde al número del equipo de trabajo

```
root@librenms:~# nano /etc/network/interfaces

# This file describes the network interfaces available on your system
# and how to activate them. For more information, see interfaces(5).

source /etc/network/interfaces.d/*

# The loopback network interface
auto lo
iface lo inet loopback

# The primary network interface
auto ens33
iface ens33 inet static
   address 192.168.50+Y.10
   netmask 255.255.255.0
   gateway 192.168.50+Y.254
   dns-nameservers  192.168.50+Y.1 192.168.50+Y.254 192.168.5.19
```

Para guardar los cambios puede presionar las teclas: "F2", "Y" y "Enter"

3.4 Activar el servicio de red

```
root@librenms:~# systemctl start networking.service
```

3.5 Verificar que los parámetros IPv4 se hayan aplicado.

Verificar la dirección IPv4

```
root@librenms:~# ifconfig

ens33     Link encap:Ethernet  HWaddr 00:0c:29:55:81:53
          inet addr:192.168.50.10  Bcast:192.168.50.255  Mask:255.255.255.0
          inet6 addr: fe80::20c:29ff:fe55:8153/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:438 errors:0 dropped:0 overruns:0 frame:0
          TX packets:334 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:42475 (42.4 KB)  TX bytes:51181 (51.1 KB)

lo        Link encap:Local Loopback
```

```
        inet addr:127.0.0.1  Mask:255.0.0.0
        inet6 addr: ::1/128 Scope:Host
        UP LOOPBACK RUNNING  MTU:65536  Metric:1
        RX packets:51959 errors:0 dropped:0 overruns:0 frame:0
        TX packets:51959 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1
        RX bytes:8276257 (8.2 MB)  TX bytes:8276257 (8.2 MB)
```

Verificar la dirección IPv4 del servidor DNS

```
root@librenms:~# cat /etc/resolv.conf

# Dynamic resolv.conf(5) file for glibc resolver(3) generated by resolvconf(8)
#       DO NOT EDIT THIS FILE BY HAND -- YOUR CHANGES WILL BE OVERWRITTEN
nameserver 192.168.50.254
nameserver 192.168.5.19
```

Verificar la dirección del Gateway

```
root@librenms:~# route -n
Kernel IP routing table
Destination     Gateway         Genmask         Flags Metric Ref    Use Iface
0.0.0.0         192.168.50.254  0.0.0.0         UG    0      0        0 ens33
192.168.50.0    0.0.0.0         255.255.255.0   U     0      0        0 ens33
```

Para la versión 18.04

Se puede instalar las net-tools para tener acceso a los antiguos comandos

3.1 Identificación de los valores y el estado de las interfaces de red

3.1.1 Identificar la versión de la distribución (Distribuciones Debian y derivados)

```
root@librenms:~# lsb_release -a

No LSB modules are available.
Distributor ID: Ubuntu
Description:    Ubuntu 18.04.2 LTS
Release:        18.04
Codename:       bionic
```

3.1.2 Listar los identificadores de las interfaces de red

```
root@librenms:~# networkctl
IDX LINK             TYPE             OPERATIONAL SETUP
  1 lo               loopback         carrier     unmanaged
  2 ens32            ether            routable    unmanaged
```

3.1.3 Listar el estado de las interfaces de red

```
root@librenms:~# ip link

1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN mode DEFAULT
group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
2: ens32: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state DOWN mode
DEFAULT group default qlen 1000
    link/ether 00:0c:29:bf:a7:a7 brd ff:ff:ff:ff:ff:ff
```

3.1.4 Activar la interfaz de red

```
root@librenms:~# ip link set ens32 up
```

3.1.5 Verificar el estado activo de la interfaz

```
root@librenms:~# ip link show ens32

2: ens32: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP mode
DEFAULT group default qlen 1000
    link/ether 00:0c:29:bf:a7:a7 brd ff:ff:ff:ff:ff:ff
Asignar una dirección de red IPv4 a una interfaz de red
```

3.2 Configuración de los valores de red

3.2.1 Asignar dirección IPv4

```
root@librenms:~# ip addr add 192.168.50.10/24 dev ens32
```

3.2.2 Verificar la asignación de la IPv4 de la interfaz de red

```
root@librenms:~# ip addr show

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
       valid_lft forever preferred_lft forever
2: ens32: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group
default qlen 1000
    link/ether 00:0c:29:bf:a7:a7 brd ff:ff:ff:ff:ff:ff
    inet 192.168.50.10/24 scope global ens32
       valid_lft forever preferred_lft forever
    inet6 fe80::20c:29ff:febf:a7a7/64 scope link
       valid_lft forever preferred_lft forever
```

3.1.3 Asignar la dirección IPv4 del Gateway predeterminado

```
root@librenms:~# ip route add default via 192.168.50.254
```

3.1.4 Comprobar la ruta del Gateway predeterminado

```
root@librenms:~# ip route show

default via 192.168.50.254 dev ens32
192.168.50.0/24 dev ens32 proto kernel scope link src 192.168.50.10
```

3.1.5 Verificar enrutamiento IPv4

```
root@librenms:~# ping 192.168.50.254 -c 3

PING 192.168.50.254 (192.168.50.254) 56(84) bytes of data.
64 bytes from 192.168.50.254: icmp_seq=1 ttl=128 time=0.104 ms
64 bytes from 192.168.50.254: icmp_seq=2 ttl=128 time=0.570 ms
64 bytes from 192.168.50.254: icmp_seq=3 ttl=128 time=0.100 ms

--- 192.168.50.254 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2036ms
rtt min/avg/max/mdev = 0.100/0.258/0.570/0.220 ms
root@librenms:~# ping 8.8.8.8 -c 3
PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.
64 bytes from 8.8.8.8: icmp_seq=1 ttl=128 time=36.7 ms
64 bytes from 8.8.8.8: icmp_seq=2 ttl=128 time=33.6 ms
64 bytes from 8.8.8.8: icmp_seq=3 ttl=128 time=31.6 ms

--- 8.8.8.8 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2006ms
rtt min/avg/max/mdev = 31.659/34.023/36.738/2.099 ms
```

3.1.6 Definir el servidor DNS

```
root@librenms:~# echo "nameserver 192.168.50.254" > /etc/resolv.conf
```

3.1.7 Comprobar la asignación del servidor DNS

```
root@librenms:~# cat /etc/resolv.conf
```

nameserver 192.168.50.254

3.1.8 Verificar la resolución de nombres a IPv4

```
root@librenms:~# nslookup www.google.com

Server:         192.168.50.254
Address:        192.168.50.254#53

Non-authoritative answer:
Name:   www.google.com
Address: 172.217.8.132
Name:   www.google.com
Address: 2607:f8b0:4008:803::2004
```

3.3 Edición de los archivos de configuración de red

3.3.1 Editar el archivo de configuración de la interfaz de red
Ahora en Ubuntu 18.04 (Destop y Server), la configuración del archivo /etc/netplan/*-netcfg.yaml sustituye a la configuración de los archivos /etc/network/interfaces y /etc/resolv.conf

La configuración de la red IPv4 será:
- Alias de la tarjeta: ens32 (verificar que sea el mismo del punto 3.1.2)
- IPv4 = 192.168.50.10
- Máscara de red = /24
- IPv4 de la pasarela de red = 192.168.50.254
- IPv4 del servidor DNS = 192.168.50.254
- Servicio que maneja la red = networkd (otro valor es NetworkManager)

```
root@librenms:~# cat /etc/netplan/01-netcfg.yaml

# This file describes the network interfaces available on your system
# For more information, see netplan(5).
network:
  version: 2
  renderer: networkd
  ethernets:
    ens32:
      dhcp4: false
      addresses: [192.168.50.10/24]
      optional: true
      gateway4: 192.168.50.254
      nameservers:
            search: [empresay.com.sv]
            addresses: [192.168.50.254, 8.8.8.8]
```

3.3.2 Prueba de la configuración recién editada

```
root@librenms:~# netplan try

Do you want to keep these settings?

Press ENTER before the timeout to accept the new configuration

Changes will revert in  119 seconds
Configuration accepted.
```

3.3.3 Ejecutar los cambios en netplan

```
root@librenms:~# netplan apply
```

Nota: Si se desea ejecutar los cambios con salidas de depuración (ver posibles errores)

```
root@librenms:~# netplan --debug apply

** (generate:7138): DEBUG: 16:23:44.233: Processing input file /etc/netplan/01-
netcfg.yaml..
** (generate:7138): DEBUG: 16:23:44.236: starting new processing pass
** (generate:7138): DEBUG: 16:23:44.238: ens32: setting default backend to 1
** (generate:7138): DEBUG: 16:23:44.239: Configuration is valid
** (generate:7138): DEBUG: 16:23:44.239: Generating output files..
** (generate:7138): DEBUG: 16:23:44.239: NetworkManager: definition ens32 is not for
us (backend 1)
DEBUG:netplan generated networkd configuration changed, restarting networkd
DEBUG:no netplan generated NM configuration exists
DEBUG:ens32 not found in {}
DEBUG:Merged config:
network:
  bonds: {}
  bridges: {}
  ethernets:
    ens32:
      addresses:
      - 192.168.50.10/24
      dhcp4: false
      gateway4: 192.168.50.254
      nameservers:
        addresses:
        - 192.168.50.254
      optional: true
  vlans: {}
  wifis: {}

DEBUG:Skipping non-physical interface: lo
DEBUG:device ens32 operstate is up, not changing
DEBUG:{}
DEBUG:netplan triggering .link rules for lo
DEBUG:netplan triggering .link rules for ens32
```

3.3.4 Ejecutar los cambios en el servicio de la red

```
root@librenms:~# systemctl restart systemd-networkd
```

Se mantienen las opciones (status, stop y start)

3.3.5 Verificar los servicios de red

```
root@librenms:~# systemctl status systemd-networkd
```

```
● systemd-networkd.service - Network Service
    Loaded: loaded (/lib/systemd/system/systemd-networkd.service; enabled-runtime;
vendor preset: enabled)
    Active: active (running) since Sat 2019-06-29 16:25:38 UTC; 8s ago
      Docs: man:systemd-networkd.service(8)
 Main PID: 7891 (systemd-network)
    Status: "Processing requests..."
     Tasks: 1 (limit: 523)
    CGroup: /system.slice/systemd-networkd.service
            └─7891 /lib/systemd/systemd-networkd

Jun 29 16:25:38 librenms systemd[1]: Starting Network Service...
Jun 29 16:25:38 librenms systemd-networkd[7891]: ens32: Gained IPv6LL
Jun 29 16:25:38 librenms systemd-networkd[7891]: Enumeration completed
Jun 29 16:25:38 librenms systemd[1]: Started Network Service.
Jun 29 16:25:38 librenms systemd-networkd[7891]: lo: Link is not managed by us
Jun 29 16:25:38 librenms systemd-networkd[7891]: ens32: Configured
```

referencia
https://netplan.io/examples

Paso 4 – Comprobación de salida a internet

4.1 Hacer ping a ww.google.com

```
root@librenms:/opt/librenms# ping www.google.com –c 2

PING www.google.com (172.217.3.68) 56(84) bytes of data.
64 bytes from mia07s54-in-f4.1e100.net (172.217.3.68): icmp_seq=1 ttl=128 time=34.1
ms
64 bytes from mia07s54-in-f4.1e100.net (172.217.3.68): icmp_seq=2 ttl=128 time=41.1
ms
^C
--- www.google.com ping statistics ---
3 packets transmitted, 2 received, 33% packet loss, time 2006ms
rtt min/avg/max/mdev = 34.135/37.642/41.149/3.507 ms
```

4.2 Instalar el mc

```
librenms@librenms:~$ sudo apt-get install mc


Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  mc-data
Suggested packages:
  arj catdvi | texlive-binaries dbview djvulibre-bin genisoimage gv links | w3m |
lynx odt2txt poppler-utils python-boto
  python-tz xpdf | pdf-viewer
The following NEW packages will be installed
  mc mc-data
0 to upgrade, 2 to newly install, 0 to remove and 8 not to upgrade.
Need to get 1,664 kB of archives.
After this operation, 7,009 kB of additional disk space will be used.
Do you want to continue? [Y/n] y

Get:1 http://gb.archive.ubuntu.com/ubuntu xenial/universe amd64 mc-data all 3:4.8.15-
2 [1,202 kB]
Get:2 http://gb.archive.ubuntu.com/ubuntu xenial/universe amd64 mc amd64 3:4.8.15-2
[462 kB]
Fetched 1,664 kB in 5s (295 kB/s)
Selecting previously unselected package mc-data.
(Reading database ... 80172 files and directories currently installed.)
Preparing to unpack .../mc-data_3%3a4.8.15-2_all.deb ...
Unpacking mc-data (3:4.8.15-2) ...
Selecting previously unselected package mc.
Preparing to unpack .../mc_3%3a4.8.15-2_amd64.deb ...
Unpacking mc (3:4.8.15-2) ...
Processing triggers for hicolor-icon-theme (0.15-0ubuntu1) ...
Processing triggers for man-db (2.7.5-1) ...
Processing triggers for mime-support (3.59ubuntu1) ...
Setting up mc-data (3:4.8.15-2) ...
Setting up mc (3:4.8.15-2) ...
```

Paso 5 – Actualizar librerías de LibreNMS

5.1 Actualizar la base de datos del repositorio

```
root@librenms:/# apt clean
```

```
root@librenms:/# apt update
```

Nota podría existir problema de caché, en las descargas, cuando esté en el laboratorio de la Universidad, e tal caso utilice el enlace hacia internet del teléfono celular

```
Hit:1 http://security.ubuntu.com/ubuntu xenial-security InRelease
Hit:2 http://gb.archive.ubuntu.com/ubuntu xenial InRelease
Hit:3 http://gb.archive.ubuntu.com/ubuntu xenial-updates InRelease
Hit:4 http://gb.archive.ubuntu.com/ubuntu xenial-backports InRelease..
. . .
. . .
```

5.2 Actualizar librerías para LibreNMS

```
root@librenms:/# apt-get install php-mbstring && sudo phpenmod mbstring

Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  php7.0-cli php7.0-common php7.0-curl php7.0-fpm php7.0-gd php7.0-json php7.0-
mbstring php7.0-mcrypt php7.0-mysql
  php7.0-opcache php7.0-readline php7.0-snmp php7.0-xml
The following NEW packages will be installed
  php-mbstring php7.0-mbstring
The following packages will be upgraded:
  php7.0-cli php7.0-common php7.0-curl php7.0-fpm php7.0-gd php7.0-json php7.0-mcrypt
php7.0-mysql php7.0-opcache
  php7.0-readline php7.0-snmp php7.0-xml
12 to upgrade, 2 to newly install, 0 to remove and 329 not to upgrade.
Need to get 4,309 kB of archives.
After this operation, 1,536 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://gb.archive.ubuntu.com/ubuntu xenial-updates/main amd64 php7.0-mysql
amd64 7.0.30-0ubuntu0.18.04.1 [125 kB]
Get:2 http://gb.archive.ubuntu.com/ubuntu xenial-updates/main amd64 php7.0-xml amd64
7.0.30-0ubuntu0.18.04.1 [113 kB]
Get:3 http://gb.archive.ubuntu.com/ubuntu xenial-updates/main amd64 php7.0-snmp amd64
7.0.30-0ubuntu0.18.04.1 [18.9 kB]
…
…
```

Seleccione la opción "Keep the local versión currently instaled" y avance (tab) a <OK>

5.3 Ingrese como el usuario librenms

5.4 cambiarse al directorio /opt/librenms

```
librenms@/ # cd /opt/librenms
```

5.5 Ejecutar archivos de actualización de los servicios de LibreNMS

```
librenms@librenms:~$ ./daily.sh

Updating to latest codebase                       OK
Updated       from       2489e70d8a3c34ae5c00204264dc01f41a22ada4       to
357139b595af89250472ffe43508c7f8569daebb                  OK
> LibreNMS\ComposerHelper::preInstall
```

```
Loading composer repositories with package information
Installing dependencies from lock file
Package operations: 61 installs, 0 updates, 0 removals
  - Installing symfony/dotenv (v3.4.11): Downloading (100%)
  - Installing amenadiel/jpgraph (3.6.19): Downloading (100%)
  - Installing dapphp/radius (2.5.4): Downloading (100%)
  - Installing doctrine/inflector (v1.1.0): Downloading (100%)
  - Installing doctrine/instantiator (1.0.5): Downloading (100%)
  - Installing easybook/geshi (v1.0.8.19): Downloading (100%)
  - Installing erusev/parsedown (1.7.1): Downloading (100%)
  - Installing ezyang/htmlpurifier (v4.10.0): Downloading (100%)
  - Installing guzzlehttp/promises (v1.3.1): Downloading (100%)
  - Installing psr/http-message (1.0.1): Downloading (100%)
  - Installing guzzlehttp/psr7 (1.4.2): Downloading (100%)
  - Installing symfony/event-dispatcher (v3.4.11): Downloading (100%)
  - Installing guzzlehttp/guzzle (6.3.3): Downloading (100%)
  - Installing influxdb/influxdb-php (1.14.5): Downloading (100%)
  - Installing jakub-onderka/php-console-color (0.1): Downloading (100%)
...
...


> LibreNMS\ComposerHelper::postInstall
setfacl: logs//error_log: Operation not permitted
setfacl: logs//access_log: Operation not permitted
Application key [base64:sqMQ85FiywrCjnlAdJxzO+BW2jYmkf7GNlaP4YnXUdo=] set
successfully.
> Illuminate\Foundation\ComposerScripts::postInstall
> php artisan optimize
Generating optimized class loader
The compiled services file has been removed.
Updating Composer packages                    OK
Updated from unset to                         OK
Updating SQL-Schema                           OK
Updating submodules                           OK
Cleaning up DB                                OK
Fetching notifications                        OK
Caching PeeringDB data                        OK
```

5.6 Actualizar dependencias

```
librenms@librenms:~$ ./scripts/composer_wrapper.php install --no-dev

> LibreNMS\ComposerHelper::preInstall
Loading composer repositories with package information
Installing dependencies from lock file
Nothing to install or update
Generating autoload files
> LibreNMS\ComposerHelper::postInstall
> Illuminate\Foundation\ComposerScripts::postInstall
> php artisan optimize
Generating optimized class loader
The compiled services file has been removed.
```

Paso 6 – Configuración de la hora del sistema

6.1 Verificar huso horario actual

```
librenms@librenms:~$ timedatectl

Local time: Thu 2018-06-28 06:58:15 BST
  Universal time: Thu 2018-06-28 05:58:15 UTC
        RTC time: Thu 2018-06-28 05:58:15
       Time zone: Europe/London (BST, +0100)
 Network time on: yes
NTP synchronized: yes
 RTC in local TZ: no
```

6.2 Definir zona horaria en el sistema operativo

```
librenms@librenms:~$ sudo timedatectl set-timezone America/El_Salvador

Password: 123456
```

6.3 Verificar el huso horario.

Reinicie el sistema operativo

```
librenms@librenms:~$ sudo reboot


librenms@librenms:~$ timedatectl

Local time: Wed 2018-06-27 23:59:52 CST
  Universal time: Thu 2018-06-28 05:59:52 UTC
        RTC time: Thu 2018-06-28 05:59:52
       Time zone: America/El_Salvador (CST, -0600)
 Network time on: yes
NTP synchronized: yes
 RTC in local TZ: no
```

Verificar que se haya cambiado

```
librenms@librenms:~$ uname -a
Linux librenms 4.4.0-21-generic #37-Ubuntu SMP Mon Apr 18 18:33:37 UTC 2016 x86_64
x86_64 x86_64 GNU/Linux
```

6.4 Definir el tipo de zona en el archivo php.ini

Hay que editar el archivo php.ini y buscar la sección date.timezone

```
root@librenms:/opt/librenms# sudo mcedit /etc/php/7.2/cli/php.ini

[sudo] password for librenms: 123456

[Date]
; Defines the default timezone used by the date functions
; http://php.net/date.timezone
;date.timezone = UTC
date.timezone = "America/El_Salvador"
```

Para guardar presione "F2" y para salir "F10"

Paso 7 Validación de dependencias de LibreNMS

7.1 Ejecutar el proceso de validación de LibreNMS

```
librenms@librenms:~$ ./validate.php

====================================
Component | Version
--------- | -------
LibreNMS  | 1.53.1
DB Schema | 2019_05_30_225937_device_groups_rewrite (135)
PHP       | 7.2.17-0ubuntu0.18.04.1
MySQL     | 10.1.38-MariaDB-0ubuntu0.18.04.2
RRDTool   | 1.7.0
SNMP      | NET-SNMP 5.7.3
====================================

[OK]    Composer Version: 1.8.6
[OK]    Dependencies up-to-date.
[OK]    Database connection successful
[FAIL]  MySQL Database collation is wrong: latin1 latin1_swedish_ci
        [FIX]:
        Check https://t.libren.ms/-zdwk for info on how to fix.
[OK]    Database schema correct
[FAIL]  You have no timezone set for php.
        [FIX]:
        http://php.net/manual/en/datetime.configuration.php#ini.date.timezone
[FAIL]  Discovery has not completed in the last 24 hours.
        [FIX]:
        Check the cron job to make sure it is running and using discovery-wrapper.py
[FAIL]  We have found some files that are owned by a different user than librenms, this
will stop you updating automatically and / or rrd files being updated causing graphs
to fail.
        [FIX]:
        sudo chown -R librenms:librenms /opt/librenms
        sudo    setfacl   -d   -m   g::rwx   /opt/librenms/rrd   /opt/librenms/logs
/opt/librenms/bootstrap/cache/ /opt/librenms/storage/
        sudo    chmod    -R    ug=rwX    /opt/librenms/rrd    /opt/librenms/logs
/opt/librenms/bootstrap/cache/ /opt/librenms/storage/
        Files:
```

```
/opt/librenms/.cache/mc/mcedit
/opt/librenms/.local/share/mc/filepos
/opt/librenms/.local/share/mc/mcedit
/opt/librenms/.config/mc/panels.ini
/opt/librenms/.config/mc/mcedit
```

7.2 Ejecutar comandos de corrección

Debido a que se necesita que la base de datos de LibreNMS pueda manejar las tildes y los caracteres que se utilizan en el idioma español, es necesario sustituir el juego de caracteris `latin1_swedish_ci` por `utf8_unicode_ci`

Para realizar lo anterior es necesario ingresar como el usuario root de Mysql, por lo que momentáneamente será necesario ingresar como el usuario administrador de Linux (root)

```
librenms@librenms:~$ su - root
Password: 123456

root@librenms:~# echo 'ALTER DATABASE librenms CHARACTER SET utf8 COLLATE
utf8_unicode_ci;' | mysql -p -u root
Enter password: 123456

root@librenms:~# exit
logout
```

Para corregir el formato de la hora, será necesario cambiar los valores en las tablas notifications y users de la base de datos librenms

```
librenms@librenms:~$ su - root
Password: 123456

root@librenms:~# mysql

Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 207
Server version: 10.1.38-MariaDB-0ubuntu0.18.04.2 Ubuntu 18.04

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
```

Listar las bases de datos:

```
MariaDB [(none)]> show databases;

+--------------------+
| Database           |
+--------------------+
| information_schema |
| librenms           |
| mysql              |
| performance_schema |
+--------------------+
4 rows in set (0.00 sec)
```

Ingresar al a base de datos

```
MariaDB [(none)]> use librenms;

Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
```

Modificar las tablas (el comando debe ser digitado en una sola línea y colocar punto y como (;) al final

```
MariaDB [librenms]> ALTER TABLE `notifications` CHANGE `datetime` `datetime`
timestamp NOT NULL DEFAULT '1970-01-02 00:00:00' ;

Query OK, 0 rows affected (0.06 sec)
Records: 0  Duplicates: 0  Warnings: 0

MariaDB [librenms]> ALTER TABLE `users` CHANGE `created_at` `created_at`
timestamp NOT NULL DEFAULT '1970-01-02 00:00:01' ;

Query OK, 0 rows affected (0.00 sec)
Records: 0  Duplicates: 0  Warnings: 0
```
Salirse de mysql

```
MariaDB [librenms]> exit

Bye
```

Regresar a usuario librenms

```
root@librenms:~# exit

logout


librenms@librenms:~$ ./discovery-wrapper.py

INFO: starting the discovery at 2019-07-06 08:52:47 with 1 threads, slowest devices
first
INFO: worker Thread-1 finished device 1 in 4 seconds
INFO: discovery-wrapper polled 1 devices in 4 seconds with 1 workers



librenms@librenms:~$ sudo chown -R librenms:librenms /opt/librenms

librenms@librenms:~$ sudo setfacl -d -m g::rwx /opt/librenms/rrd
/opt/librenms/logs /opt/librenms/bootstrap/cache/ /opt/librenms/storage/

librenms@librenms:~$ sudo chmod -R ug=rwX /opt/librenms/rrd /opt/librenms/logs
/opt/librenms/bootstrap/cache/ /opt/librenms/storage/
```

Paso 8 – Validación de librerías y dependencias de LireNMS

8.1 Ingresar como la cuenta de usuario librenms

8.2 Seleccionar el directorio /opt/librenms

8.3 Ejecutar el Script de validación

```
librenms@librenms:~$ ./validate.php

===================================
Component | Version
--------- | -------
LibreNMS  | 1.53.1
DB Schema | 2019_05_30_225937_device_groups_rewrite (135)
PHP       | 7.2.17-0ubuntu0.18.04.1
MySQL     | 10.1.38-MariaDB-0ubuntu0.18.04.2
RRDTool   | 1.7.0
SNMP      | NET-SNMP 5.7.3
===================================

[OK]    Composer Version: 1.8.6
[OK]    Dependencies up-to-date.
[OK]    Database connection successful
[OK]    Database schema correct
```

Paso 9 – Ingresar al Appliance de LibreNMS

Ingrese en un navegador Web (de preferencia Mozilla FireFox)

Librenms / D32fwefwef
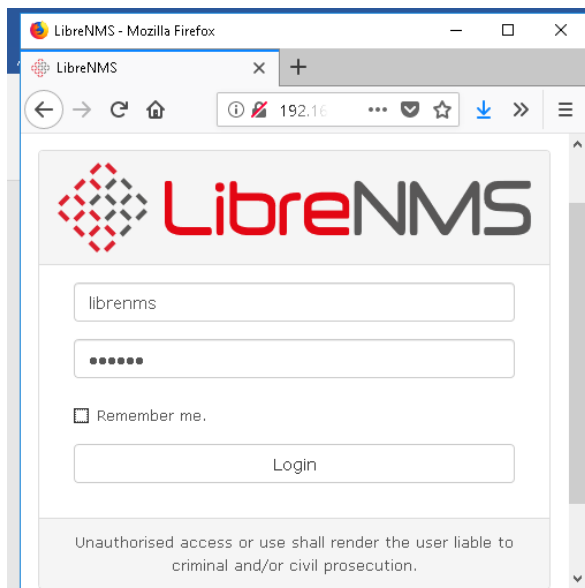
Cambie la contraseña del usuario: librenms a 123456

Menú configuración (engranaje)
Seleccionar "Edit user"
Dar clic en botón "Edit user"

Edit user - LibreNMS - Mozilla Firefox

Edit user - LibreNMS

192.168.5

LibreNMS

✓ User has been updated

✓ User password has been updated

✓ User default dashboard updated

Realname

Email