

MeshCentral

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Implantación de Sistemas Operativos
1º ASIR

Índice

Información sobre MeshCentral.....	3
Introducción.....	3
Obxectivos.....	3
Resumo.....	3
Configuracións iniciais para MeshCentral.....	4
Requisitos.....	4
Instalación de MeshCentral.....	5
Configurar ip, nome e paquetes:.....	5
Instalar GuestAdditions:.....	6
Instalación de paquetes necesarios.....	7
Primeiros pasos en Meshcentral.....	12
Incorporación dunha nova máquina: Ubuntu Desktop 20.04.....	13
Incorporación dunha nova máquina: Windows 10 Cliente.....	14
Funcionalidades de Meshcentral.....	15
Opcións de My Device.....	16
Mensaxes entre máquinas.....	16
Visualización e control remoto.....	17
Acceso a terminal.....	18
Acceso a archivos.....	19
Ver os eventos do equipo.....	20
Ver os detalles de cada equipo.....	21
Acceso a consola.....	22
Opcións de My Account.....	23
Opcións de My Events.....	23
Acceso aos eventos do servidor.....	23
Acceso a visualización e creación de reportes.....	24
Opcións de My Files.....	24
Control total dos archivos do servidor.....	24
Opcións de My Users.....	25
Visualización de usuarios.....	25
Creación de usuarios.....	25
Edición de usuarios creados.....	26
Opcións de My Server.....	26
Acceso ao estado xeral do servidor.....	26
Acceso as estadísticas do servidor.....	27
Acceso a consola do servidor.....	27
Acceso ao trazado do servidor.....	28
Agregados.....	29
Creación e compartición da carpeta Común mediante Samba.....	29
Creación e comparticion no servidor.....	29
Configuración do cliente Ubuntu Desktop 18.04 para Común.....	30
Configuración do cliente Windows 10 Cliente para Común.....	34
Conclusións.....	35
Referencias.....	36

Información sobre MeshCentral

Introducción

MeshCentral é unha ferramenta de xestión remota e control de dispositivos desenvolvida por Ylian Saint-Hilaire, enxeñeiro principal con ampla experiencia en desenvolvemento na nube, arquitectura de software e seguridade de redes. Autor de software de xestión remota na nube con máis de 6 millóns de descargas e amplamente utilizado por empresas Fortune 500. Autor de 21 patentes, recibiu dous Premios de Logros de Intel e 10 premios de Intel por falar en público e participar na comunidade de software. Bilingüe en inglés e francés.

A súa creación, MeshCentral, é unha solución de código aberto que permite aos administradores de sistemas acceder e xestionar de forma centralizada computadoras e dispositivos en rede desde calquera ubicación a través dunha interface web.

Os comezos de MeshCentral remóntanse a 2014, cando Ylian Saint-Hilaire creou o proxecto como unha solución para administrar e controlar dispositivos na súa casa. Ao longo dos anos, MeshCentral evolucionou e converteuse nunha ferramenta potente e versátil utilizada por administradores de sistemas, profesionais de TI e outros usuarios en todo o mundo.

Obxectivos

Os obxectivos principais de MeshCentral son simplificar a administración remota de dispositivos, ofrecer unha solución de código aberto e segura, e proporcionar unha plataforma flexible e extensible que se adapte ás necesidades de diferentes entornos de rede. MeshCentral enfócase en brindar unha xestión remota fácil e segura para dispositivos en rede, incluíndo computadoras de escritorio, servidores, dispositivos IoT e máis.

MeshCentral utilízase nunha ampla variedade de casos de uso, incluíndo a administración de sistemas informáticos en empresas, a xestión de infraestruturas de TI en centros de datos, a administración de dispositivos IoT en redes industriais e a asistencia remota a usuarios finais. MeshCentral permite aos administradores de sistemas realizar tarefas como controlar o escritorio remoto, transferir arquivos, xestionar actualizacións, monitorar o rendemento do sistema e moito máis, o que o converte nunha ferramenta versátil para a administración de dispositivos en rede.

Resumo

En conclusión, MeshCentral é unha solución de código aberto de xestión remota e control de dispositivos que ofrece unha interface web fácil de usar, seguridade e flexibilidade para administrar dispositivos en rede desde calquera ubicación. Co seu enfoque na simplicidade, seguridade e código aberto, MeshCentral converteuse nunha ferramenta popular para a administración de sistemas e dispositivos nunha ampla variedade de entornos de rede.

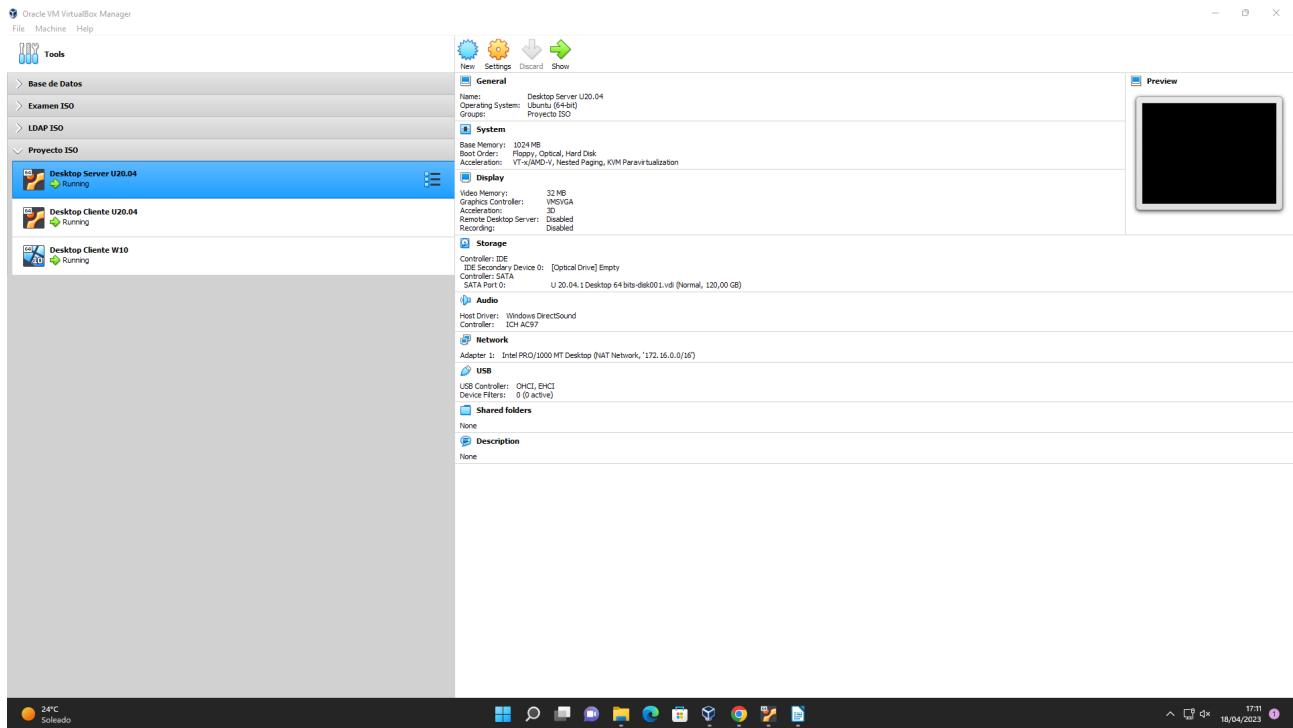
Configuracións iniciais para MeshCentral

Requisitos

Para este proxecto foi necesario un software de virtualización, neste caso VirtualBox 6.1.34, con conexión a Internet para poder executar as máquinas virtuais previamente configuradas nunha rede NAT (172.16.0.0) para ter comunicación entre elas nunha rede privada e saída a internet para a capacidade de descargar paquetes no caso de que faga falta.

As máquinas virtuais empregadas foron duas Ubuntu Desktop 20.04, unha empregada para o servidor e outra empregada para o cliente co nome de Server e EQ-01 como se verá más adiante, e unha máquina Windows 10 Desktop, empregada asimesmo para o outro cliente co nome EQ-02.

Este proxecto non está realizado cunha máquina sen entorno gráfico dado que as funcións de MeshCentral exténdense más alá das capacidades propias de unha máquina cmd.

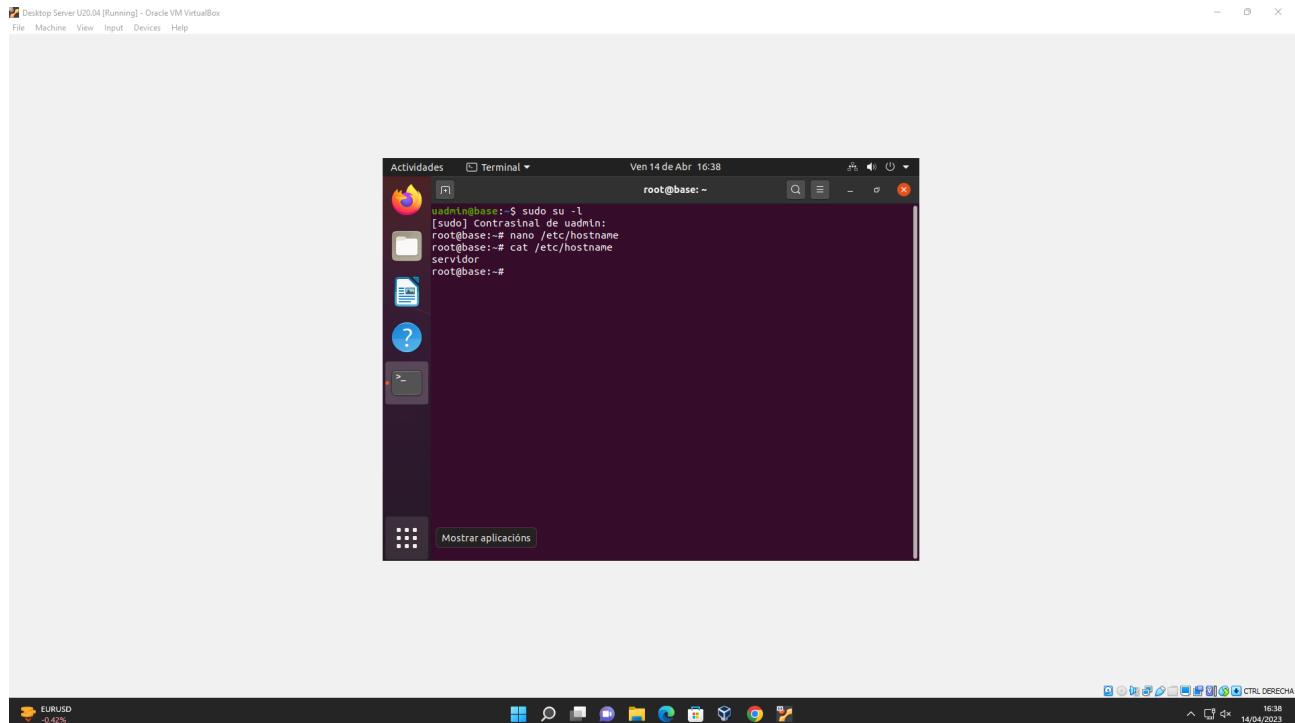


Instalación de MeshCentral

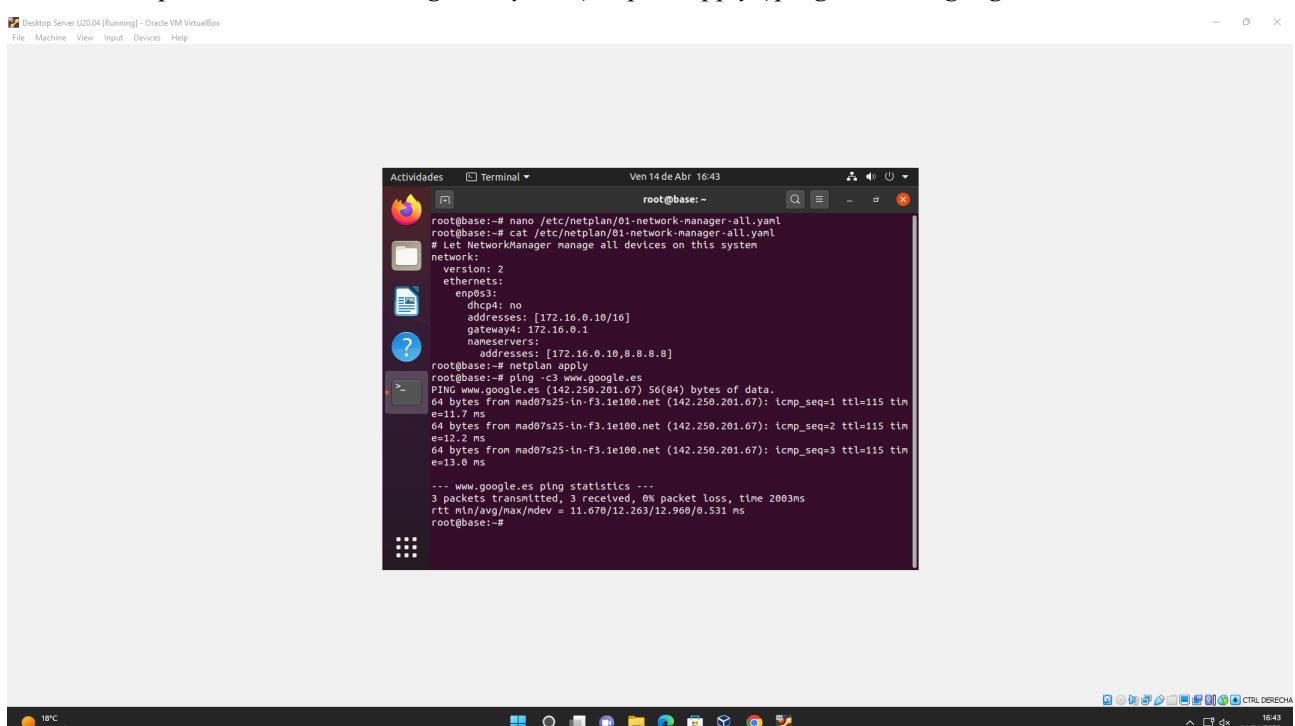
Para a instalación de Meshcentral unha vez realizado os pasos previos dentro do VirtualBox e iniciar unha máquina Ubuntu 20.04 para establecelo como servidor:

Configurar ip, nombre e paquetes:

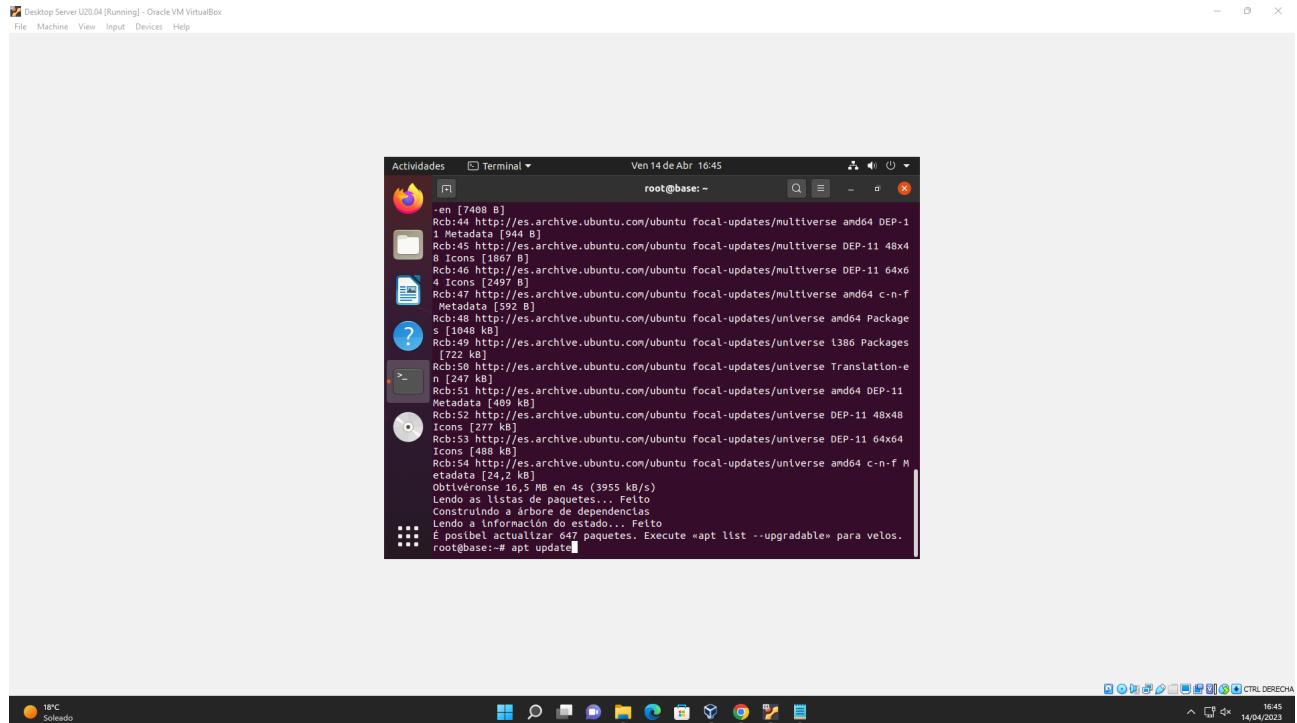
nano /etc/hostname



nano /etc/netplan/01-networkmanager-all.yaml | netplan apply | ping -c3 www.google.es



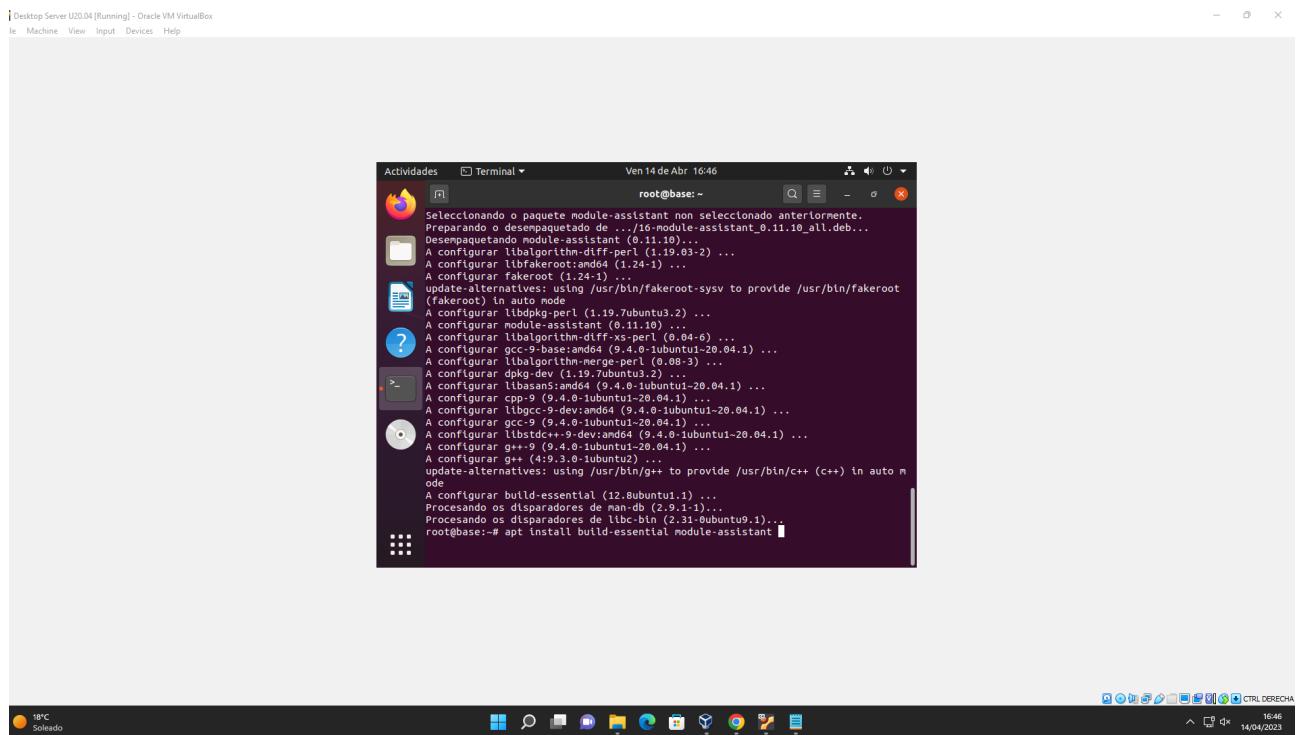
```
apt update
```



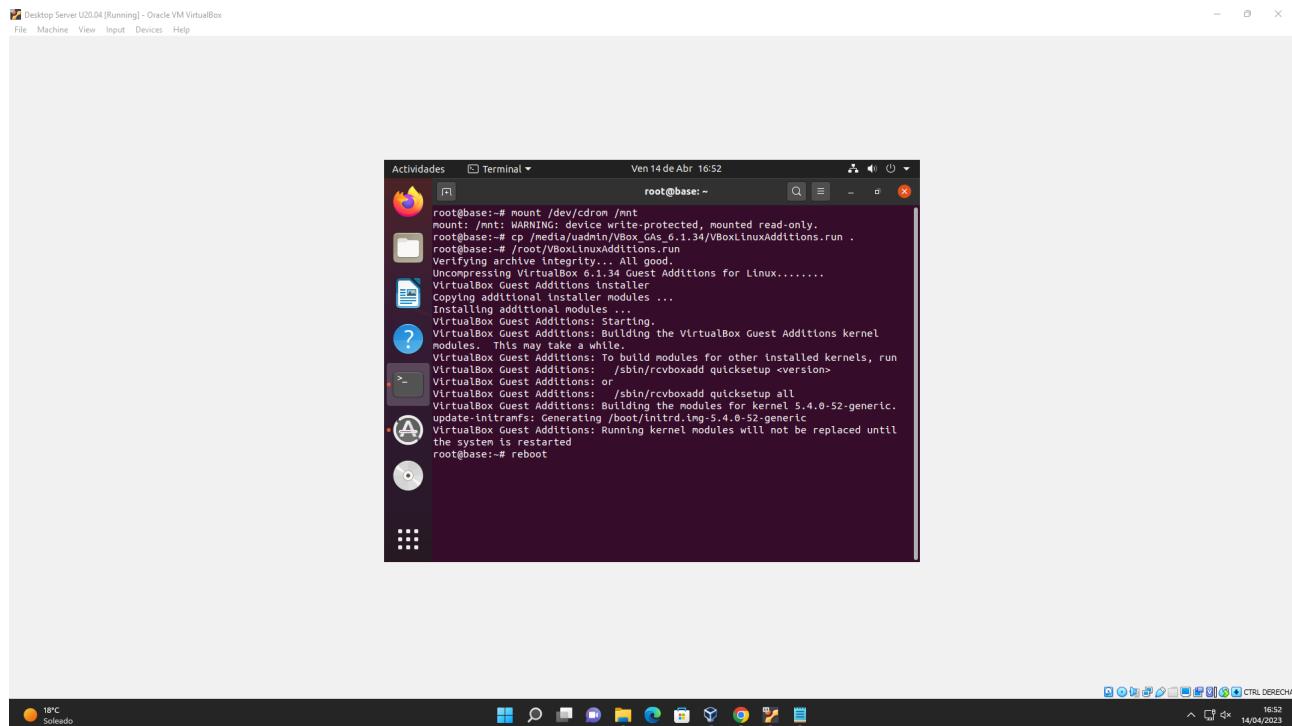
Instalar GuestAdditions:

Devices -> Insert GuestAdditions CD image ...

```
apt install build-essential module-assistant
```

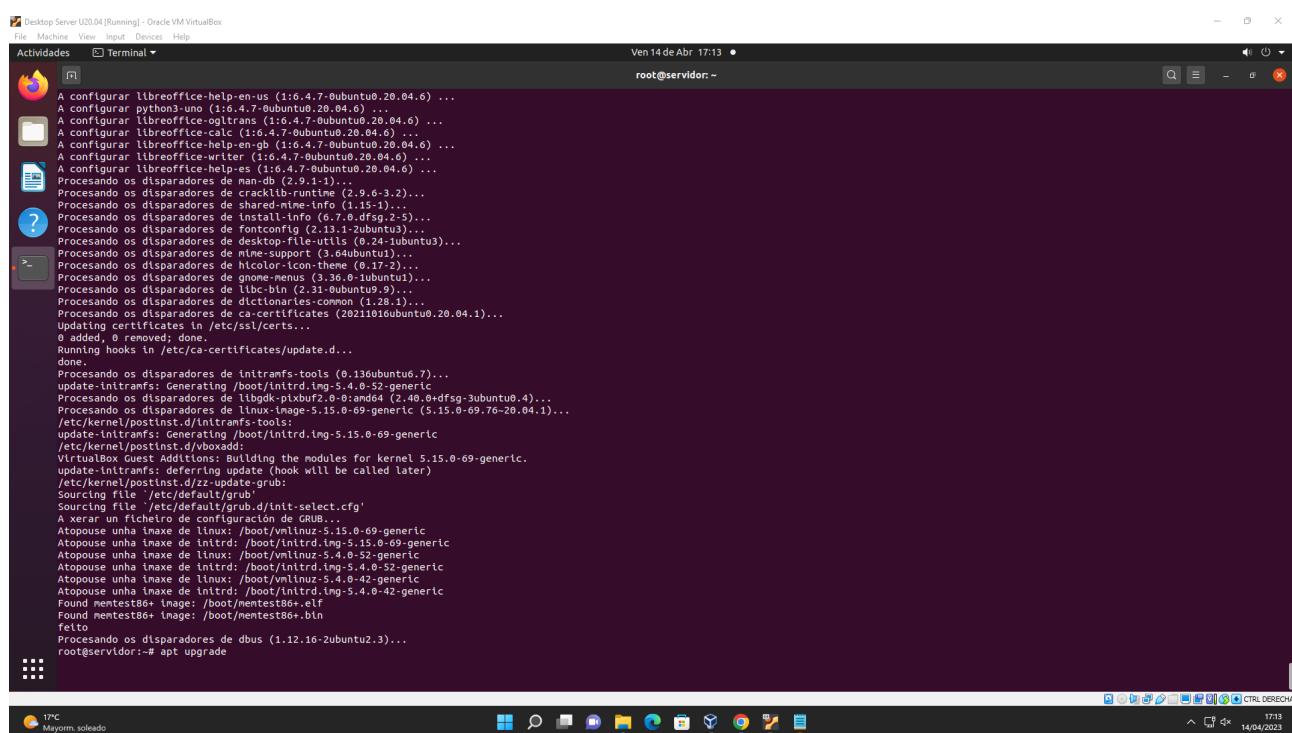


```
mount /dev/cdrom /mnt | cp /media/uadmin/Vbox_Gas_6.1.34/VboxLinuxAdditions.run .
/root/VboxLinuxAdditions.run | reboot
```

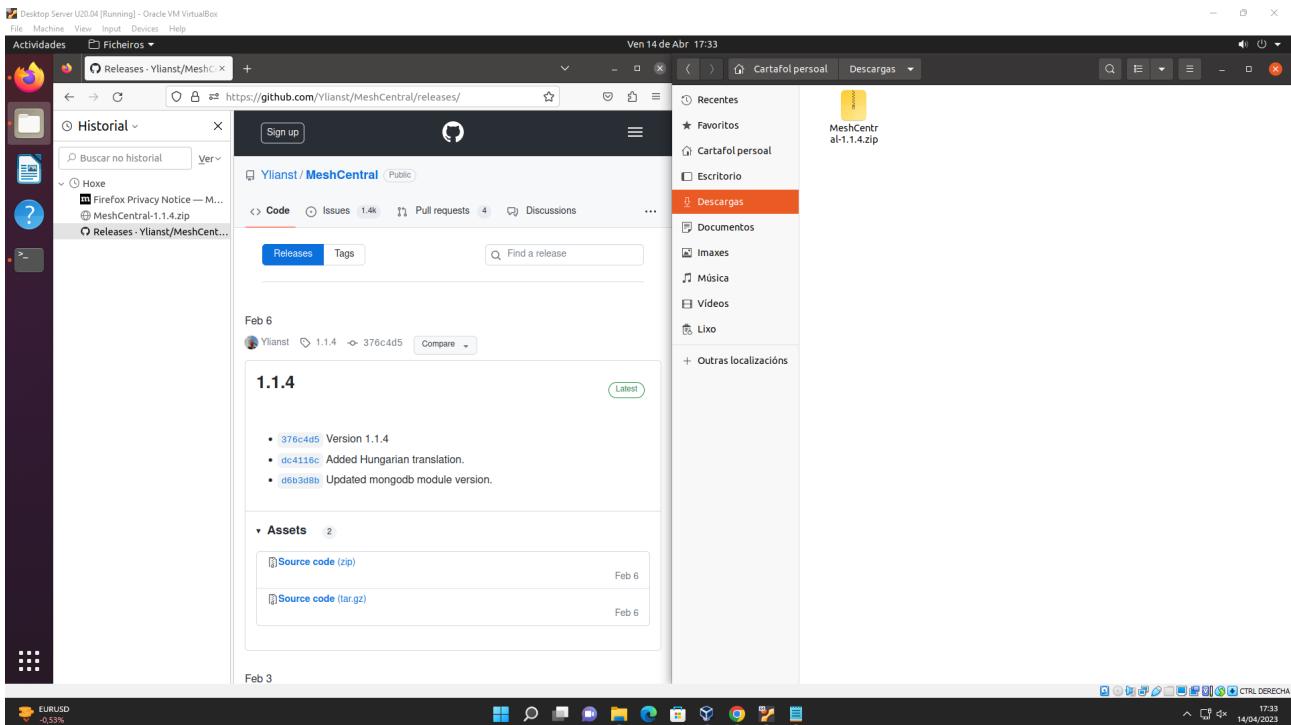


Instalación de paquetes necesarios

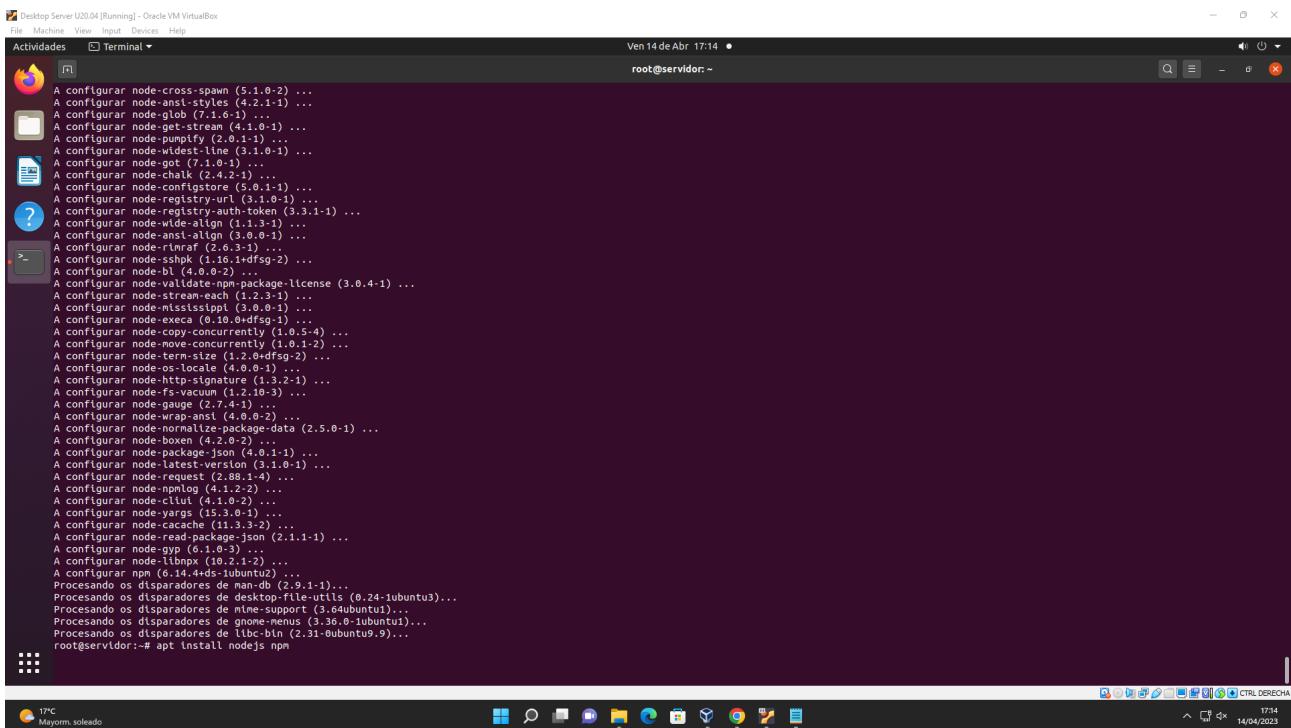
apt upgrade



Descargar Meshcentral no github do mencionado Ylian Saint-Hilaire, pódese descargar nun zip ou pode se copiar o enlace e pegalo na consola pero neste caso aproveitei a ferramenta unzip instalada unha vez feito o comando upgrade para despois volcar os ficheiros nun directorio determinado.



apt install nodejs



Ao instalar NodeJS co comando anterior, se facemos `node -v` indicaranos que a versión instalada será a 10.19, que será moi antiga xa que meshcentral require Node.js 12 ou superior co cal teremos que executar os seguintes comandos para actualizar a versión

```
curl -sL https://deb.nodesource.com/setup_14.x | sudo -E bash -
```

```
ubuntu-20.04-desktop-amd64 clonar [Corriendo] - Oracle VM VirtualBox
Archivo Máquina Ver Entrada Dispositivos Ayuda
Actividades Terminal 7 de may 15:30 • root@servidor:~
```

```
Des:3 http://security.ubuntu.com/ubuntu focal-security InRelease [114 kB]
Des:4 http://es.archive.ubuntu.com/ubuntu focal-backports InRelease [108 kB]
Des:5 http://es.archive.ubuntu.com/ubuntu focal-updates/main amd64 DEP-11 Metadata [274 kB]
Des:6 http://es.archive.ubuntu.com/ubuntu focal-updates/universe amd64 DEP-11 Metadata [410 kB]
Des:7 http://es.archive.ubuntu.com/ubuntu focal-security/main amd64 DEP-11 Metadata [59,8 kB]
Des:8 http://es.archive.ubuntu.com/ubuntu focal-updates/multiverse amd64 DEP-11 Metadata [944 kB]
Des:9 http://es.archive.ubuntu.com/ubuntu focal-backports/main amd64 DEP-11 Metadata [7,996 kB]
Des:10 http://es.archive.ubuntu.com/ubuntu focal-backports/universe amd64 DEP-11 Metadata [30,5 kB]
Des:11 http://security.ubuntu.com/ubuntu focal-security/universe amd64 DEP-11 Metadata [95,4 kB]
Des:12 http://security.ubuntu.com/ubuntu focal-security/multiverse amd64 DEP-11 Metadata [940 kB]
Descargados 1.216 kB en 1s (994 kB/s)
Leyendo lista de paquetes... Hecho

## Confirming "focal" is supported...
+ curl -sLF -o /dev/null 'https://deb.nodesource.com/node_14.x/dists/focal/Release'
## Adding the NodeSource signing key to your keyring...
+ curl -s https://deb.nodesource.com/gpgkey/nodesource.gpg.key | gpg --dearmor | tee /usr/share/keyrings/nodesource.gpg >/dev/null
## Creating apt sources list file for the NodeSource Node.js 14.x repo...
+ echo 'deb [signed-by=/usr/share/keyrings/nodesource.gpg] https://deb.nodesource.com/node_14.x focal main' > /etc/apt/sources.list.d/nodesource.list
+ echo 'deb-src [signed-by=/usr/share/keyrings/nodesource.gpg] https://deb.nodesource.com/node_14.x focal main' >> /etc/apt/sources.list.d/nodesource.list
## Running 'apt-get update' for you...
+ apt-get update
Obj:1 http://security.ubuntu.com/ubuntu focal-security InRelease
Des:1 2 https://deb.nodesource.com/node_14.x focal InRelease [4.583 B]
Obj:2 http://es.archive.ubuntu.com/ubuntu focal InRelease
Obj:3 http://es.archive.ubuntu.com/ubuntu focal-updates InRelease
Obj:4 http://es.archive.ubuntu.com/ubuntu focal-backports InRelease
Des:5 https://deb.nodesource.com/node_14.x focal/main amd64 Packages [776 B]
Descargados 5.359 B en 1s (5.349 kB/s)
Leyendo lista de paquetes... Hecho

## Run 'sudo apt-get install -y nodejs' to install Node.js 14.x and npm
## You may also need development tools to build native addons:
  sudo apt-get install gcc g++ make
## To install the Yarn package manager, run:
  curl -sL https://dl.yarnpkg.com/debian/pubkey.gpg | gpg --dearmor | sudo tee /usr/share/keyrings/yarnkey.gpg >/dev/null
  echo 'deb [signed-by=/usr/share/keyrings/yarnkey.gpg] https://dl.yarnpkg.com/debian stable main' | sudo tee /etc/apt/sources.list.d/yarn.list
  sudo apt-get update && sudo apt-get install yarn
root@servidor:~# curl -sL https://deb.nodesource.com/setup_14.x | sudo -E bash -
```

Unha vez feito este paso anterior, que agrega uns repositorios ao Node.js, teremos que volver a instalar nodejs con `apt install nodejs`

```
ubuntu-20.04-desktop-amd64 clonar [Corriendo] - Oracle VM VirtualBox
Archivo Máquina Ver Entrada Dispositivos Ayuda
Actividades Terminal 7 de may 15:31 • root@servidor:~
```

```
sudo apt-get update && sudo apt-get install yarn
root@servidor:~# apt install nodejs
Leyendo lista de paquetes... Hecho
Creado árbol de dependencias
Leyendo la información de estado... Hecho
Los paquetes indicados a continuación se instalaron de forma automática y ya no son necesarios.
  gir1.2-goa-1.0 libfcprint-2-tod1 libfwupdplugin1 libl10n10 libxmlb1
  linux-image-5.4.0-42-generic linux-modules-5.4.0-42-generic
  linux-modules-extra-5.4.0-42-generic
  Utilizadas automáticamente para eliminarlos.
  Los siguientes paquetes se ELIMINARÁN:
    libnode64 nodejs-doc
Se actualizan los siguientes paquetes:
  nodejs
  1 actualizados, 0 nuevos se instalarán, 2 para eliminar y 0 no actualizados.
  Se necesita descargar 25,4 MB de archivos.
  Se utilizarán 25,4 MB de espacio de disco adicional después de esta operación.
  ¿Realmente continúas? [S/n]: S
Des:1 https://deb.nodesource.com/node_14.x focal/main amd64 nodejs amd64 14.21.3-deb-1nodesource1 [25,4 MB]
Descargados 25,4 MB en 11s (2.388 kB/s)
(Leyendo la base de datos ... 228466 ficheros o directorios instalados actualmente.)
Desinstalando nodejs-doc (10.19.0-dfsg-3ubuntu1) ...
dpkg: libnode64: problemas de dependencias, pero se desinstalará de todas formas
tal y como se solicitó:
  nodejs depende de libnode64 (= 10.19.0-dfsg-3ubuntu1).

Desinstalando libnode64:amd64 (10.19.0-dfsg-3ubuntu1) ...
(Leyendo la base de datos ... 228349 ficheros o directorios instalados actualmente.)
Preparando para desempaquetar .../nodejs_14.21.3-deb-1nodesource1_amd64.deb ...
Desempaquetando nodejs (14.21.3-deb-1nodesource1) sobre (10.19.0-dfsg-3ubuntu1) ...
Configurando nodejs (14.21.3-deb-1nodesource1) ...
Procesando respuestas para libc-bin (2.31-0ubuntu9.9) ...
Procesando diccionarios para man-db (2.9.1-1) ...
Scanning proceses...
Scanning linux images...

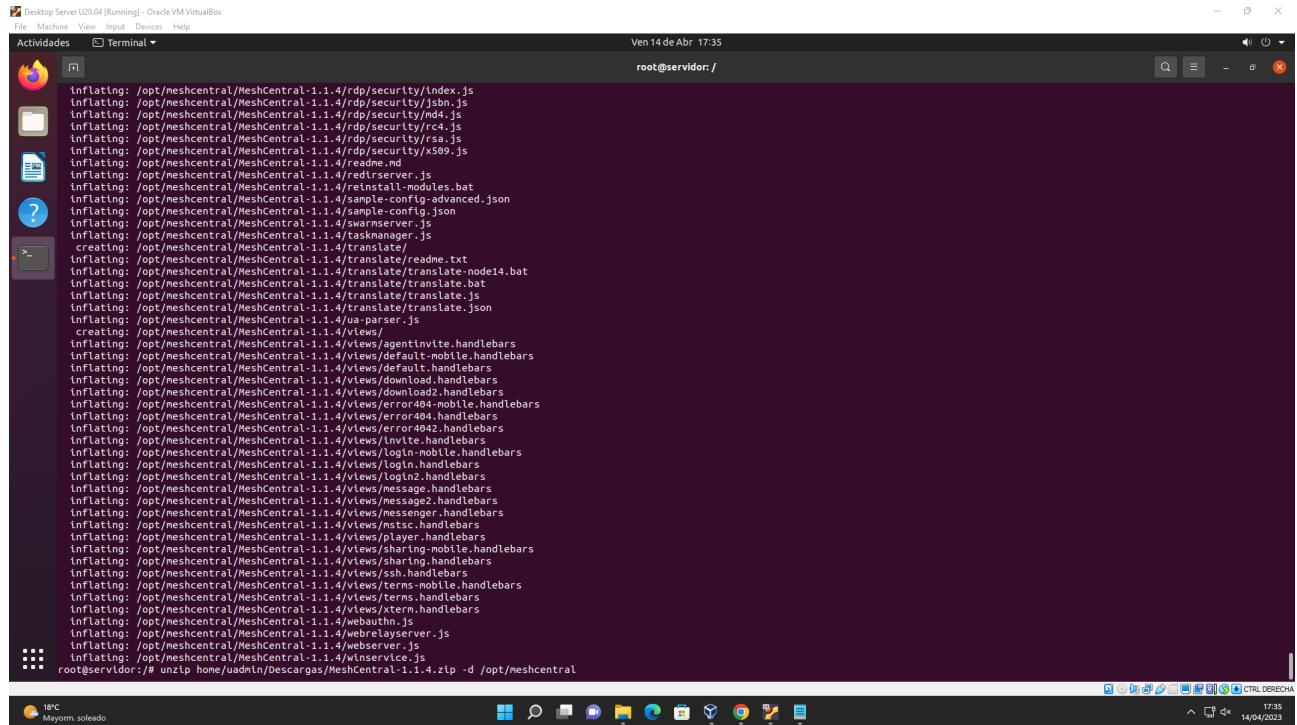
Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

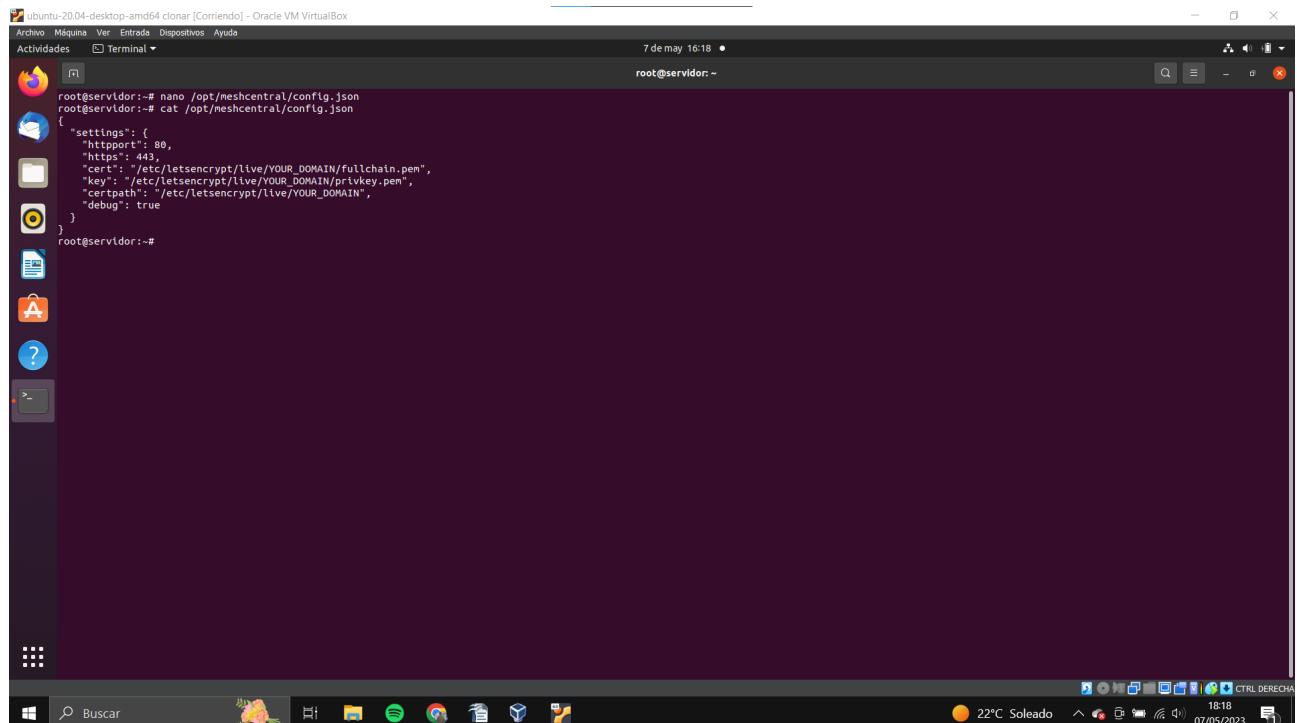
No user sessions are running outdated binaries.
root@servidor:~# node -v
v14.21.3
root@servidor:~# apt install nodejs
```

```
unzip /home/uadmin/Descargas/MeshCentral-1.1.4.zip -d /opt/meshcentral
```



```
Desktop Server U20.04 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Actividades Terminal Ven 14 de Abr 17:35
root@servidor: ~
inflating: /opt/meshcentral/MeshCentral-1.1.4/rdp/security/index.js
inflating: /opt/meshcentral/MeshCentral-1.1.4/rdp/security/lshn.js
inflating: /opt/meshcentral/MeshCentral-1.1.4/rdp/security/md4.js
inflating: /opt/meshcentral/MeshCentral-1.1.4/rdp/security/rc4.js
inflating: /opt/meshcentral/MeshCentral-1.1.4/rdp/security/rsa.js
inflating: /opt/meshcentral/MeshCentral-1.1.4/rdp/security/x509.js
inflating: /opt/meshcentral/MeshCentral-1.1.4/reinstall/reinstall.js
inflating: /opt/meshcentral/MeshCentral-1.1.4/reinstall-modules.bat
inflating: /opt/meshcentral/MeshCentral-1.1.4/sample-config-advanced.json
inflating: /opt/meshcentral/MeshCentral-1.1.4/sample-config.json
inflating: /opt/meshcentral/MeshCentral-1.1.4/swarmserver.js
inflating: /opt/meshcentral/MeshCentral-1.1.4/tasksmanager.js
inflating: /opt/meshcentral/MeshCentral-1.1.4/tasksmanager-worker.js
inflating: /opt/meshcentral/MeshCentral-1.1.4/translate/readme.txt
inflating: /opt/meshcentral/MeshCentral-1.1.4/translate/translate-node14.bat
inflating: /opt/meshcentral/MeshCentral-1.1.4/translate/translate.bat
inflating: /opt/meshcentral/MeshCentral-1.1.4/translate/translate.js
inflating: /opt/meshcentral/MeshCentral-1.1.4/translate/translate.json
inflating: /opt/meshcentral/MeshCentral-1.1.4/jua-parser.js
Creating: /opt/meshcentral/MeshCentral-1.1.4/views/_agent
inflating: /opt/meshcentral/MeshCentral-1.1.4/views/_agent/agentinvite.handlebars
inflating: /opt/meshcentral/MeshCentral-1.1.4/views/default.handlebars
inflating: /opt/meshcentral/MeshCentral-1.1.4/views/download.handlebars
inflating: /opt/meshcentral/MeshCentral-1.1.4/views/download2.handlebars
inflating: /opt/meshcentral/MeshCentral-1.1.4/views/error404-mobile.handlebars
inflating: /opt/meshcentral/MeshCentral-1.1.4/views/error404-tablet.handlebars
inflating: /opt/meshcentral/MeshCentral-1.1.4/views/invite.handlebars
inflating: /opt/meshcentral/MeshCentral-1.1.4/views/login-mobile.handlebars
inflating: /opt/meshcentral/MeshCentral-1.1.4/views/login.handlebars
inflating: /opt/meshcentral/MeshCentral-1.1.4/views/login2.handlebars
inflating: /opt/meshcentral/MeshCentral-1.1.4/views/mage.handlebars
inflating: /opt/meshcentral/MeshCentral-1.1.4/views/message.handlebars
inflating: /opt/meshcentral/MeshCentral-1.1.4/views/mobile-share.handlebars
inflating: /opt/meshcentral/MeshCentral-1.1.4/views/mtsc.handlebars
inflating: /opt/meshcentral/MeshCentral-1.1.4/views/player.handlebars
inflating: /opt/meshcentral/MeshCentral-1.1.4/views/sharing-mobile.handlebars
inflating: /opt/meshcentral/MeshCentral-1.1.4/views/sharing.handlebars
inflating: /opt/meshcentral/MeshCentral-1.1.4/views/ssh.handlebars
inflating: /opt/meshcentral/MeshCentral-1.1.4/views/tterns-mobile.handlebars
inflating: /opt/meshcentral/MeshCentral-1.1.4/views/tterns-tablet.handlebars
inflating: /opt/meshcentral/MeshCentral-1.1.4/views/tterns.handlebars
inflating: /opt/meshcentral/MeshCentral-1.1.4/webauthn.js
inflating: /opt/meshcentral/MeshCentral-1.1.4/webrelayserver.js
inflating: /opt/meshcentral/MeshCentral-1.1.4/webserver.js
inflating: /opt/meshcentral/MeshCentral-1.1.4/winservice.js
root@servidor: # unzip /home/uadmin/Descargas/MeshCentral-1.1.4.zip -d /opt/meshcentral
```

```
cd /opt/meshcentral | npm install | nano config.json
```

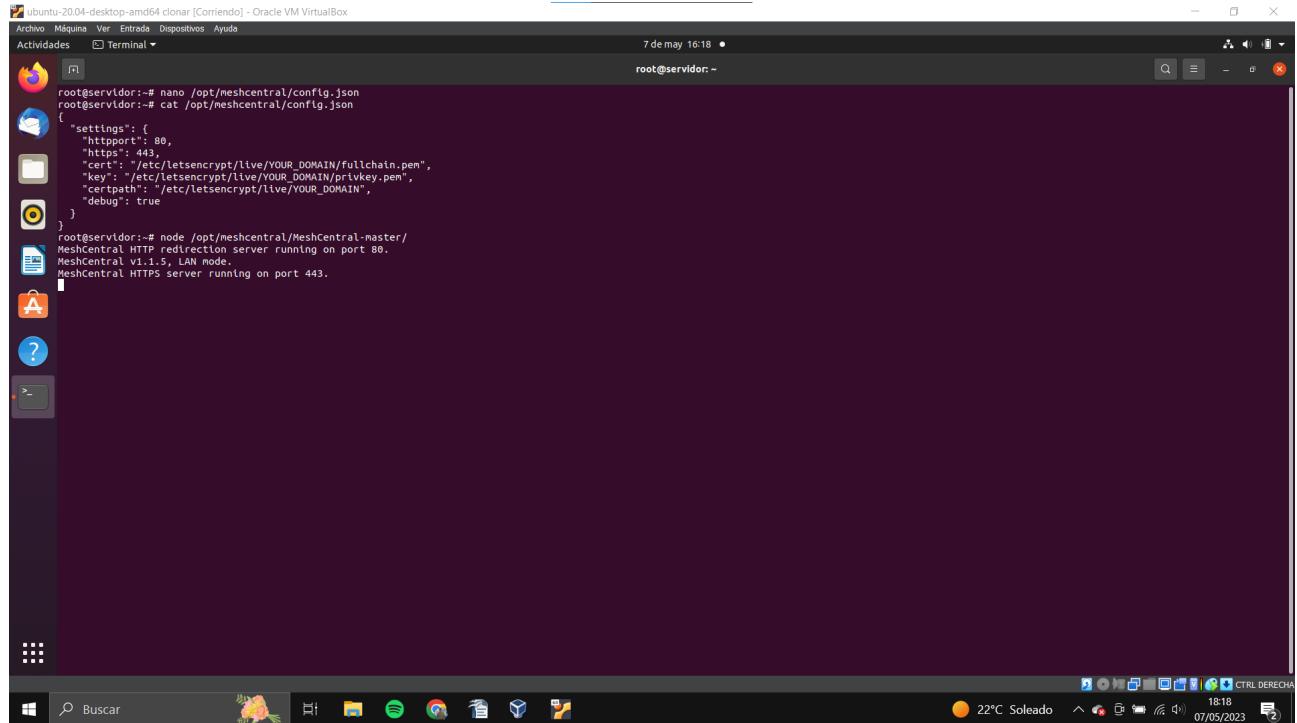


```
ubuntu-20.04-desktop-amd64 clonar [Corriendo] - Oracle VM VirtualBox
Archivo Máquina Ver Entrada Dispositivos Ayuda
Actividades Terminal 7 de may 16:18 •
root@servidor: ~
root@servidor: # nano /opt/meshcentral/config.json
root@servidor: # cat /opt/meshcentral/config.json
{
  "settings": {
    "httpport": 80,
    "https": 443,
    "cert": "/etc/letsencrypt/live/YOUR_DOMAIN/fullchain.pem",
    "key": "/etc/letsencrypt/live/YOUR_DOMAIN/privkey.pem",
    "certpath": "/etc/letsencrypt/live/YOUR_DOMAIN",
    "debug": true
  }
}
root@servidor: #
```

Cada vez que queiramos usar Meshcentral hai que executar:

`node /opt/meshcentral/Meshcentral-*`

* Indica a version e pode ser 1.1.4, master, etc.



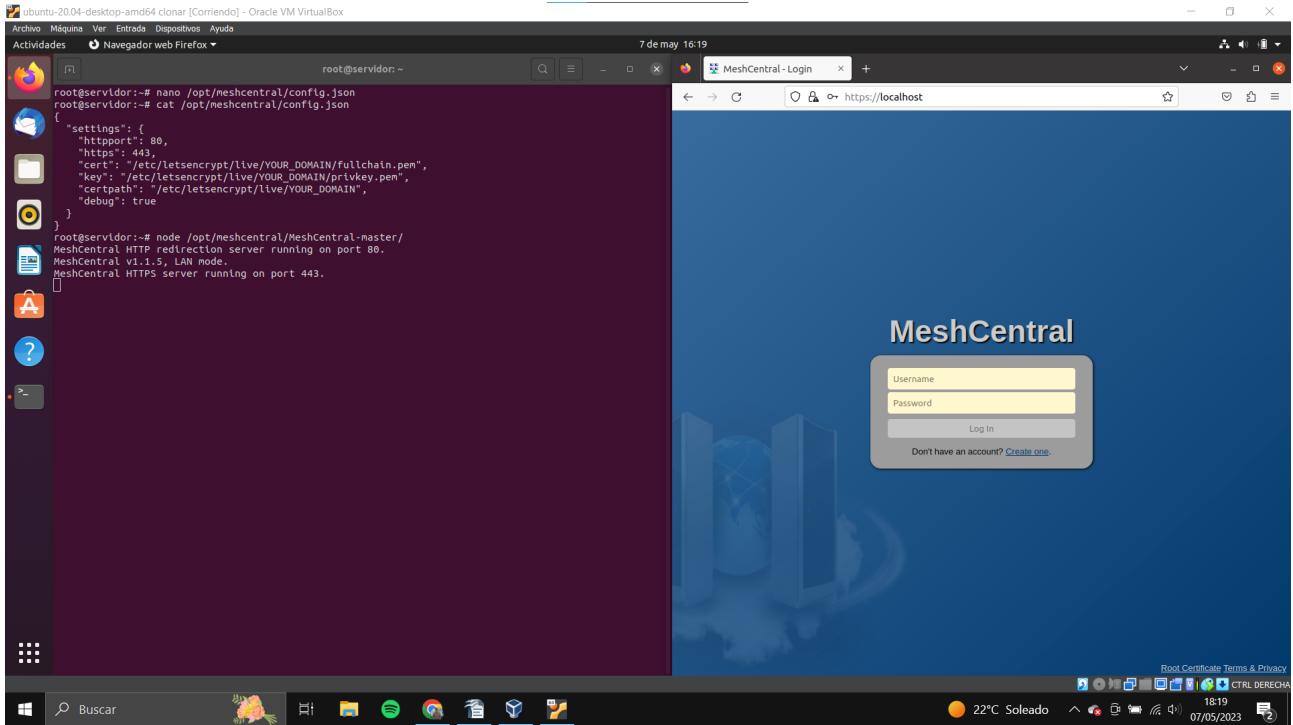
The screenshot shows a terminal window titled "ubuntu-20.04-desktop-amd64 clonar [Corriendo] - Oracle VM VirtualBox". The terminal session is as follows:

```
root@servidor:~# nano /opt/meshcentral/config.json
root@servidor:~# cat /opt/meshcentral/config.json
{
  "settings": [
    {
      "httpport": 80,
      "https": 443,
      "cert": "/etc/letsencrypt/live/YOUR_DOMAIN/fullchain.pem",
      "key": "/etc/letsencrypt/live/YOUR_DOMAIN/privkey.pem",
      "certpath": "/etc/letsencrypt/live/YOUR_DOMAIN",
      "debug": true
    }
  ]
}
root@servidor:~# node /opt/meshcentral/MeshCentral-master/
MeshCentral HTTP redirection server running on port 80.
MeshCentral v1.1.5, LAN mode.
MeshCentral HTTPS server running on port 443.
```

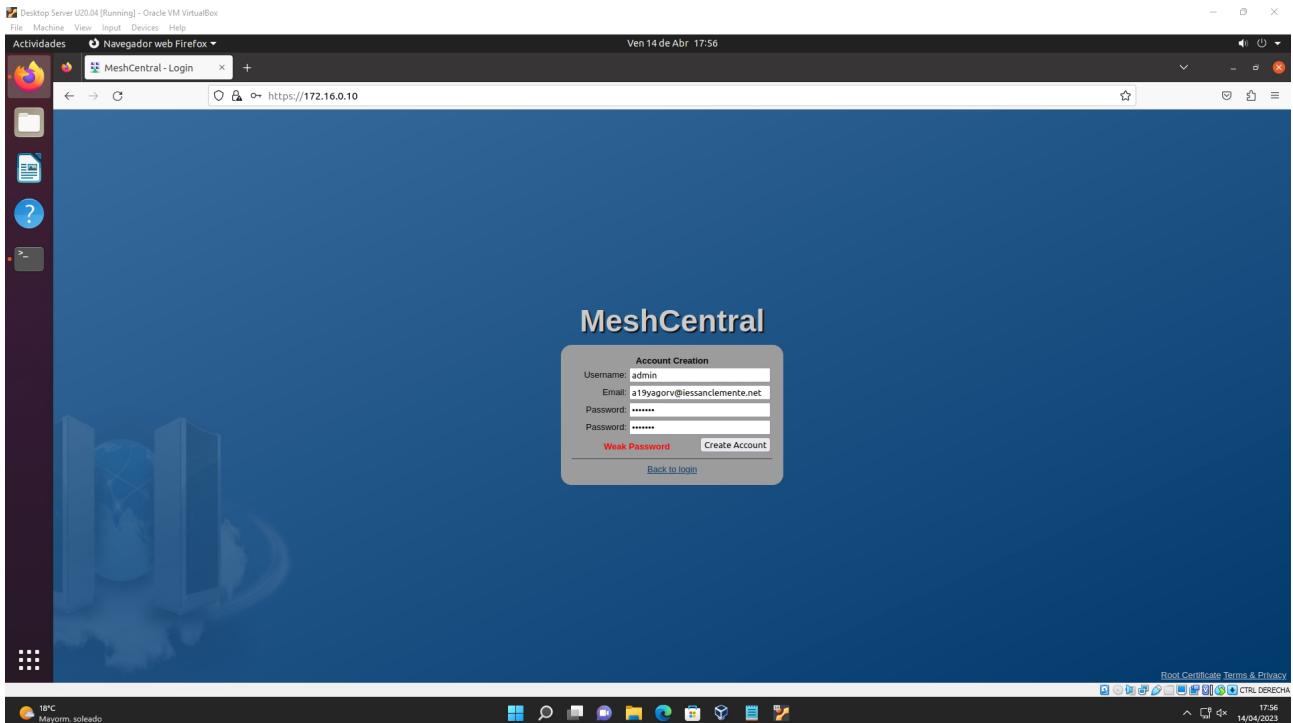
The desktop environment includes a dock with icons for File Explorer, Spotify, and other applications. The system tray shows the date (07/05/2023), time (18:18), weather (22°C Soleado), and battery status.

Primeiros pasos en Meshcentral

Unha vez executado o comando anterior, abrimos una nova xanela nun navegador e introducimos a ip do servidor (172.16.0.10) ou se esta en NAT chegaría con localhost e se todo se realizou correctamente aparecerá un login de MeshCentral.



Crearemos unha conta para poder entrar

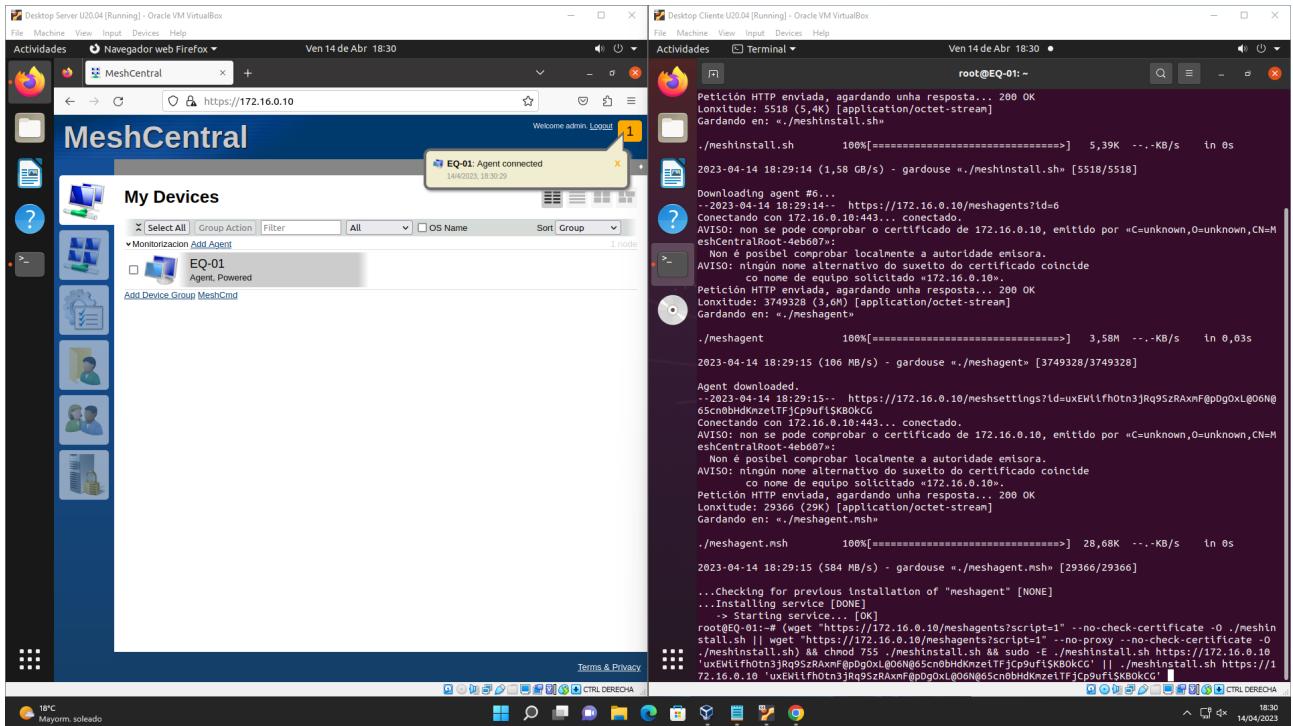


Unha vez creada a conta iniciamos sesión e crearemos un grupo, neste caso Monitorización o cal poderemos administrar

Incorporación dunha nova máquina: Ubuntu Desktop 20.04

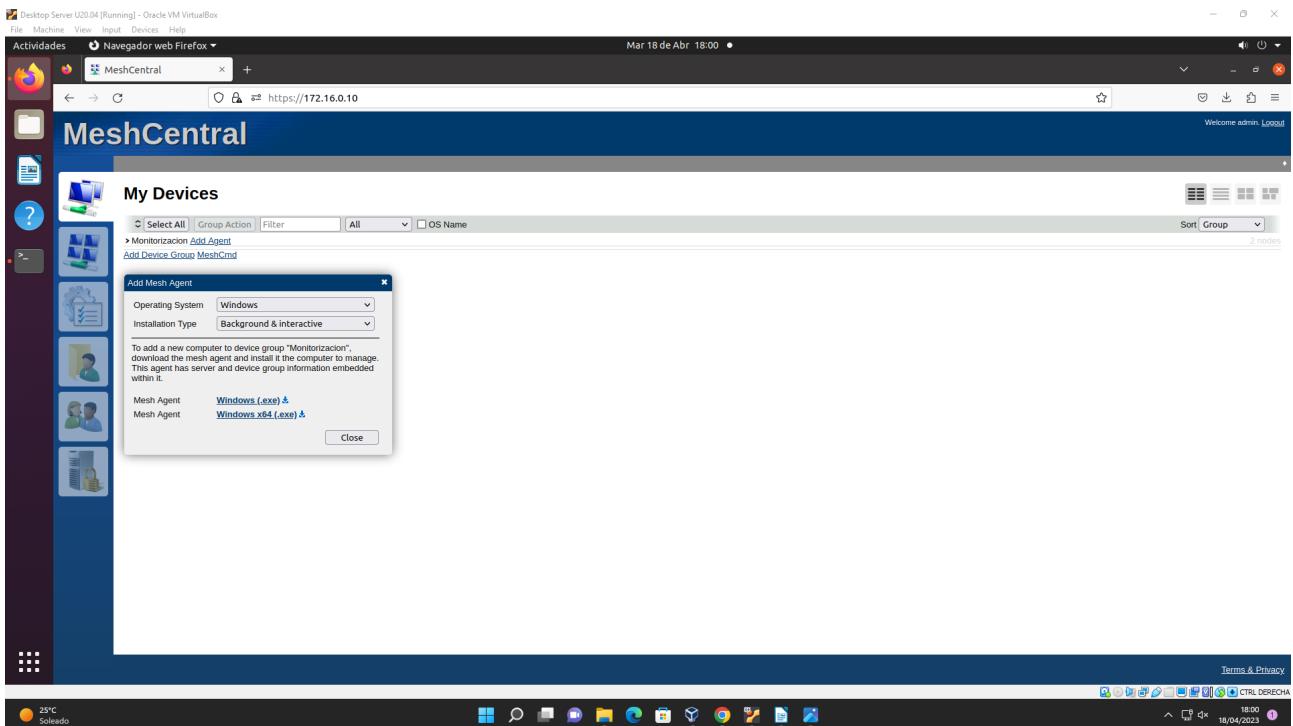
Unha vez realizado todos os pasos de configurar o nome, a ip, os paquetes e insertar as GuestAdditions a máquina está lista para introducir, no servidor imos ao grupo creado e imos a opción de AddAgent e seleccionamos Linux/BSD e aparecerános o comando que haberá que executar no cliente

Ao insertar o comando no cliente, esperamos uns segundos e xa nos aparecerá a notificación no servidor de que se uniu un Axente ao grupo Monitorización

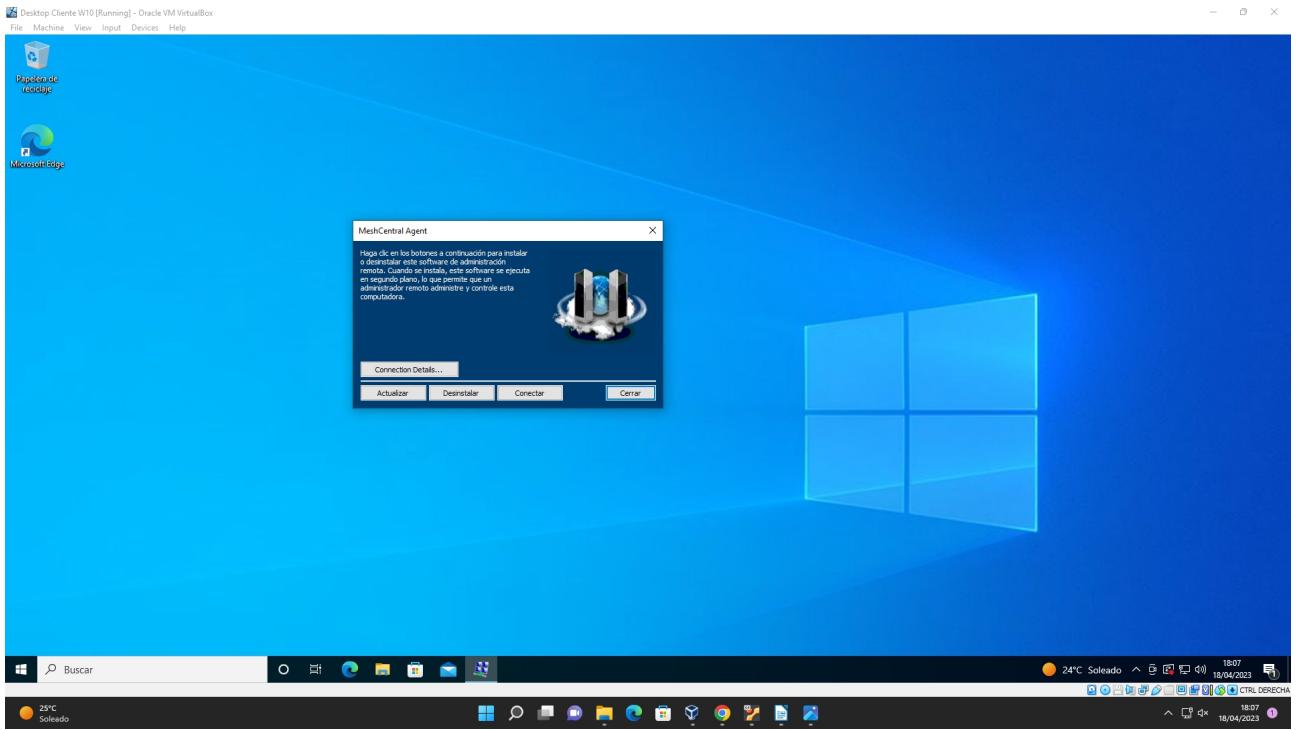


Incorporación dunha nova máquina: Windows 10 Cliente

En windows unha vez cambiado a ip e o nome e insertado as GuestAdditions poderemos instalar Meshcentral, neste caso a instalación e máis sinxela, o unico que teremos que facer e descargar un .exe



Este .exe deberemos levalo ao cliente mediante carpeta compartida ou a nube como pode ser Google Drive e instalalo



Unha vez feito esto, segundos depois chegará a notificación ao servidor de que EQ-02 se uniu ao grupo de Monitorización e xa estamos listos para explotar as utilizadas de Meshcentral.

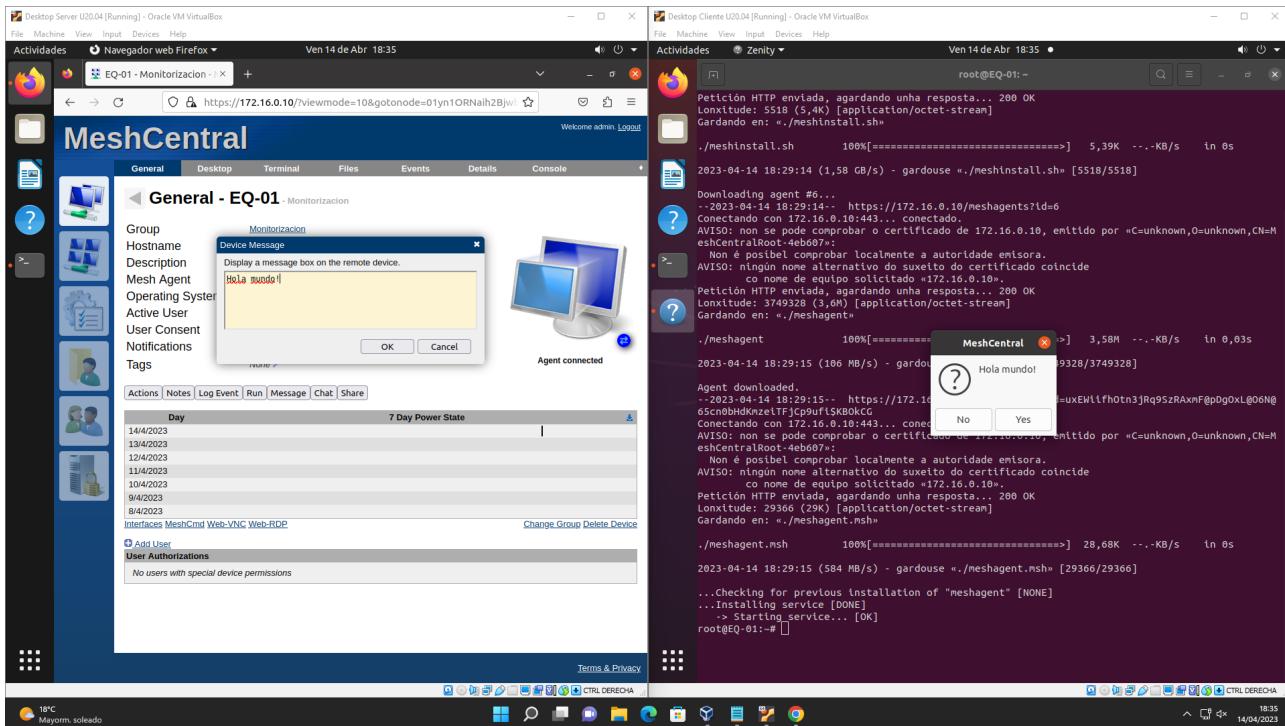
Funcionalidades de Meshcentral

Unha vez realizado os pasos anteriores, no servidor se entramos nun dos equipos aparecerán as características xerais nas que se pode ir apreciando o potencial desta ferramenta

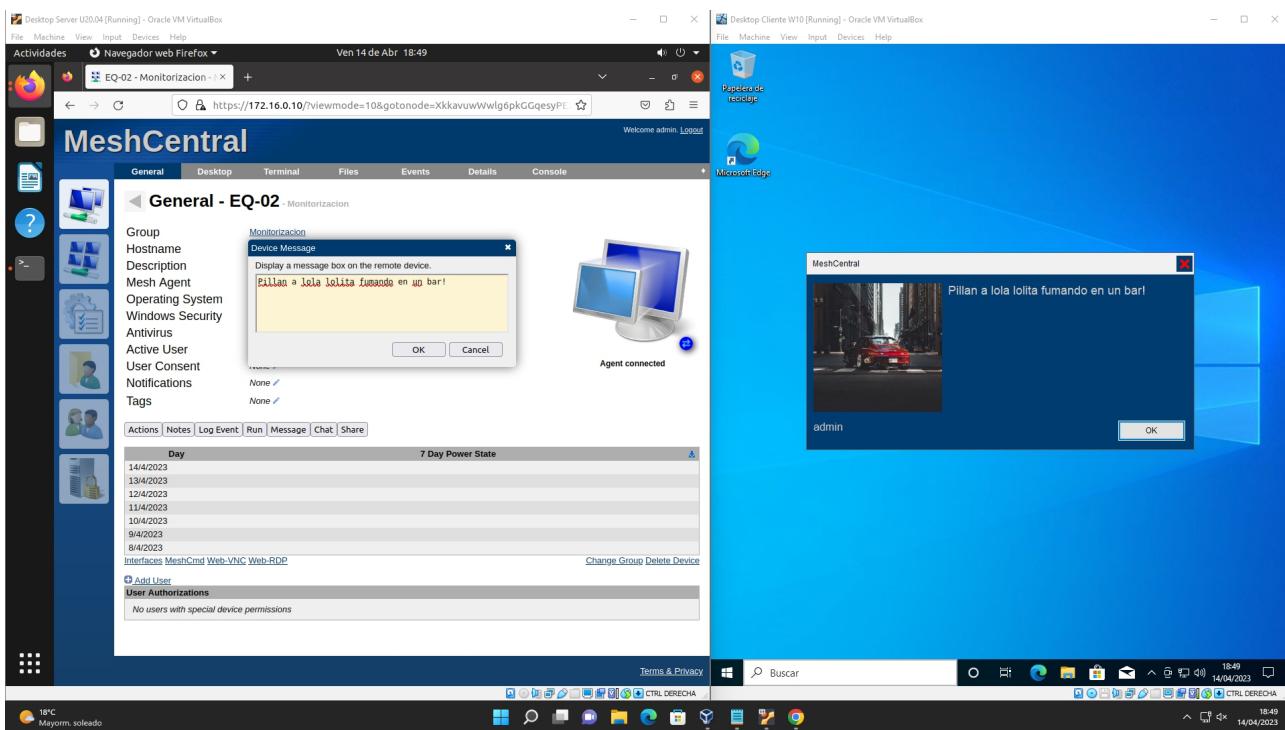
Opcións de My Device

Mensaxes entre máquinas

Do servidor a máquina Ubuntu 20.04

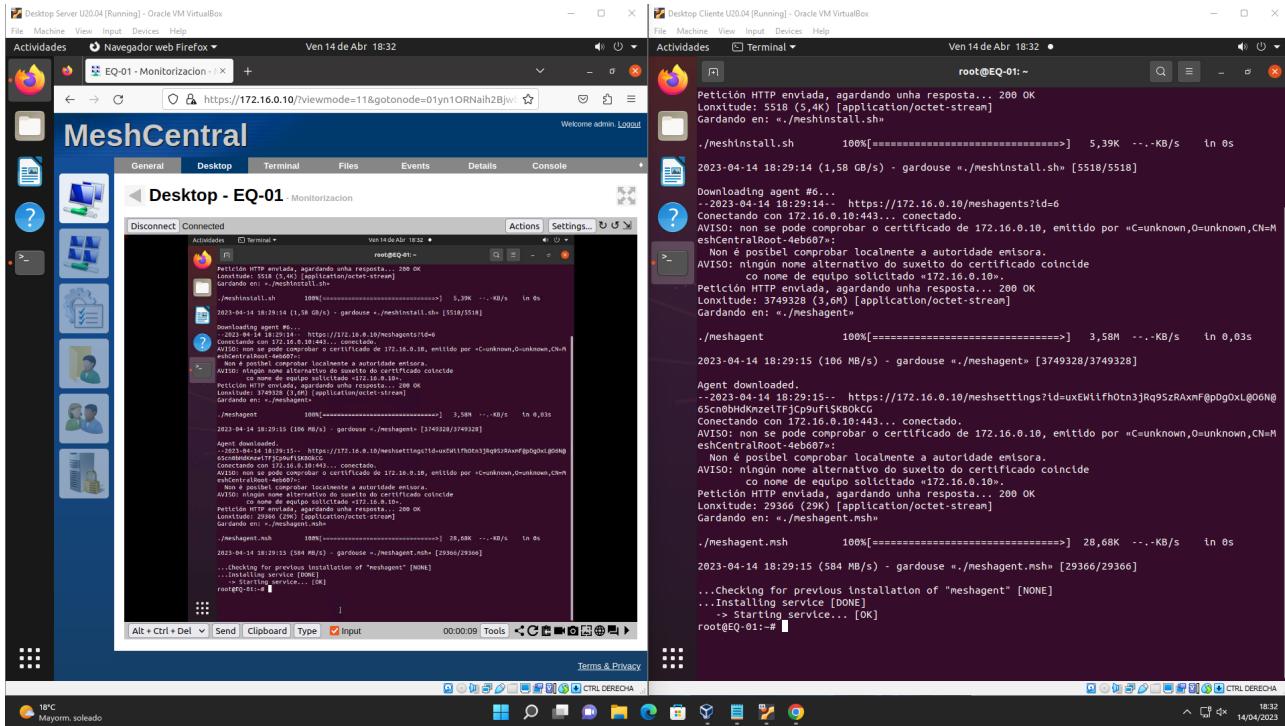


Do servidor a máquina Windows 10

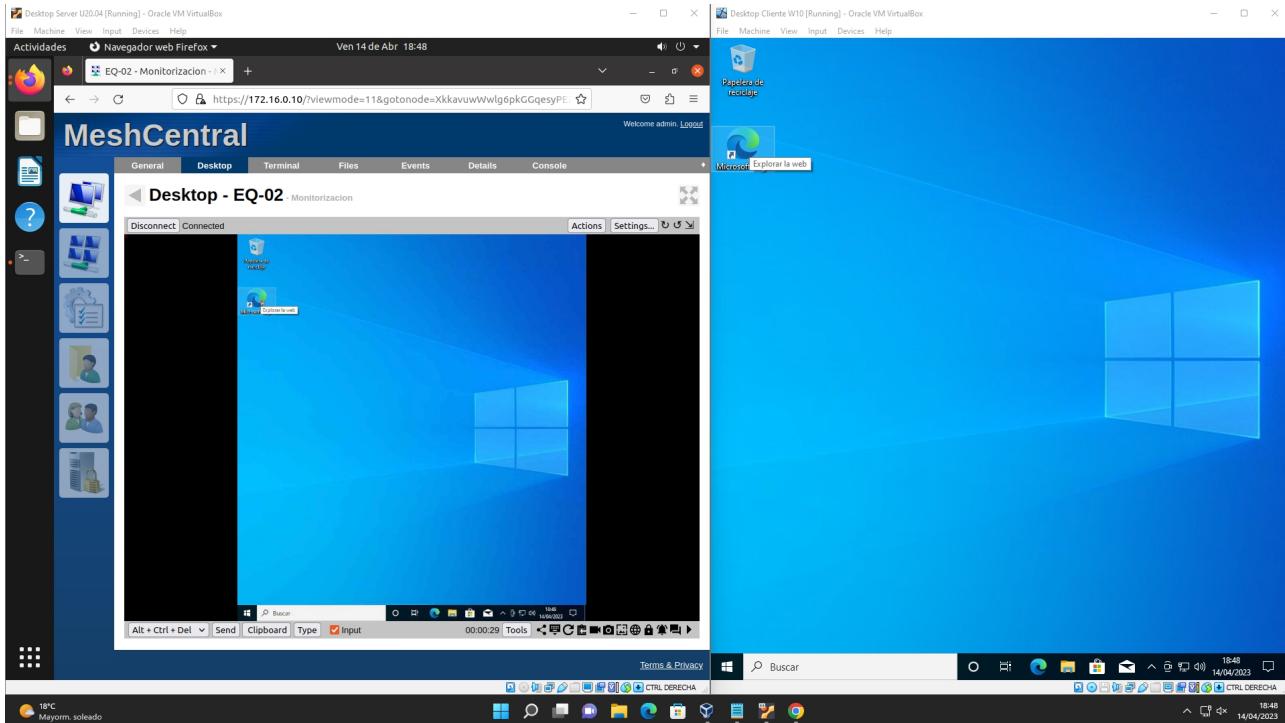


Visualización e control remoto

Do servidor a máquina Ubuntu 20.04

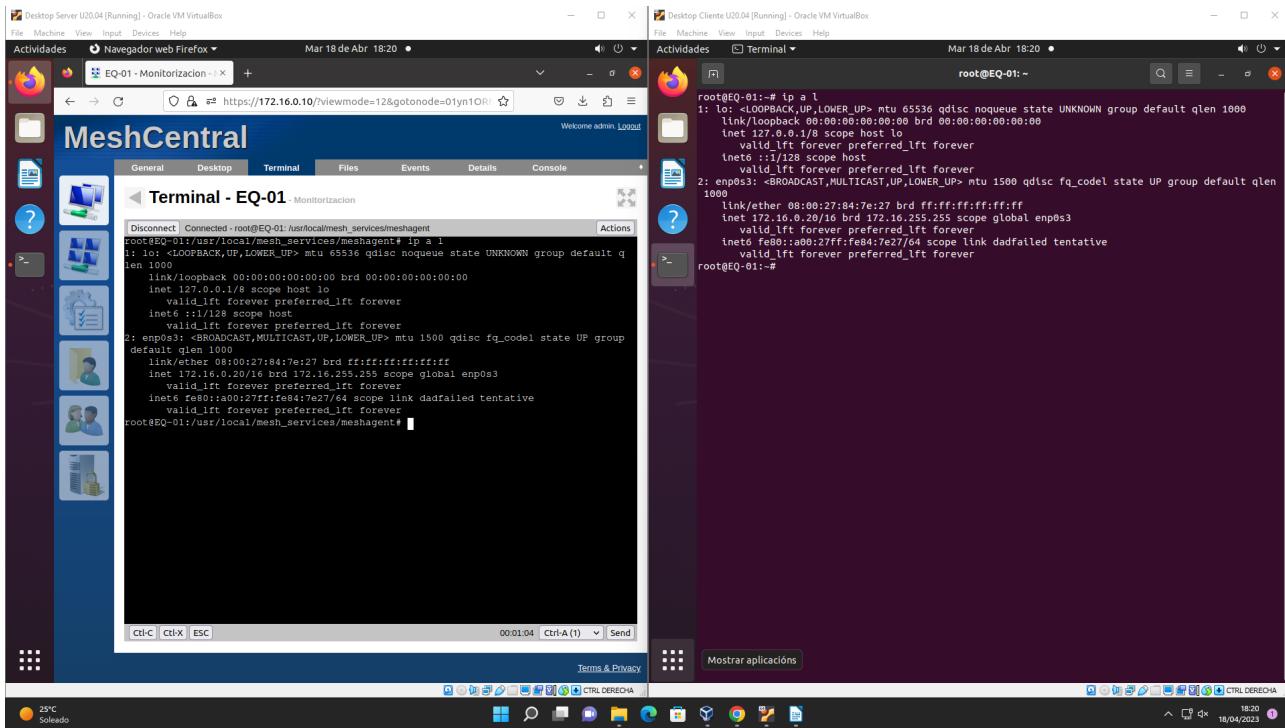


Do servidor a máquina Windows 10

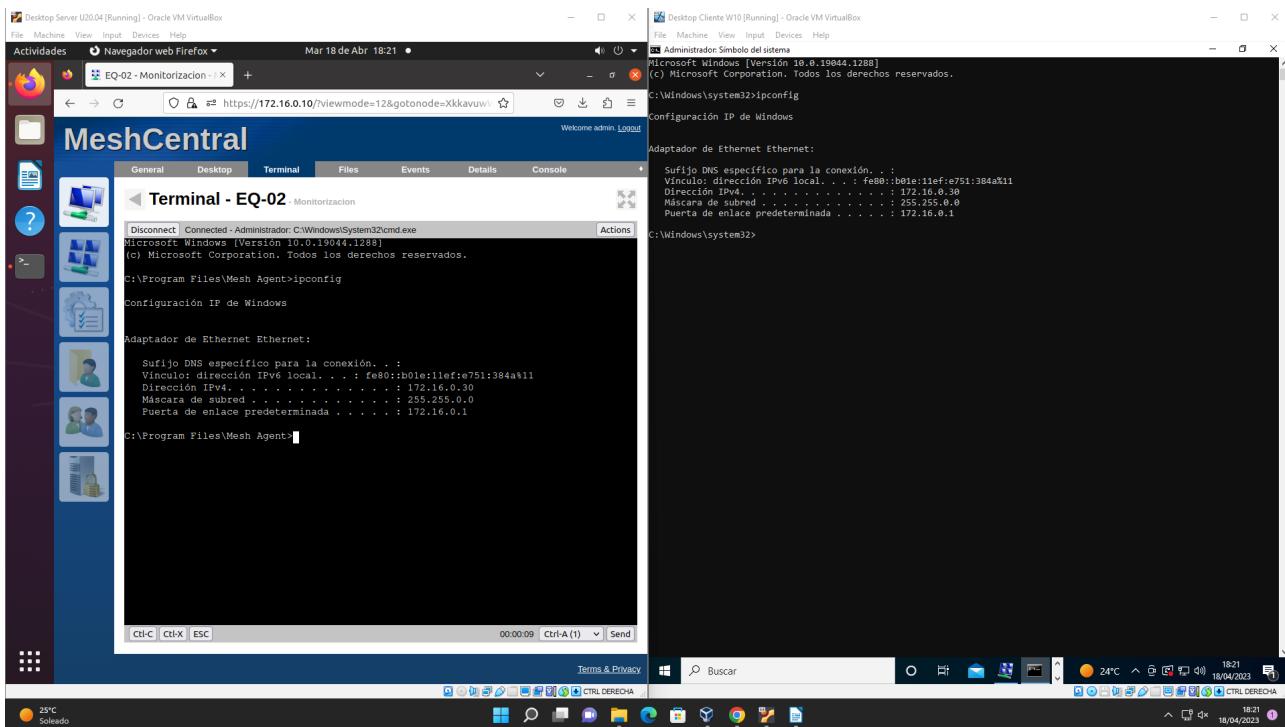


Acceso a terminal

Do servidor a máquina Ubuntu 20.04

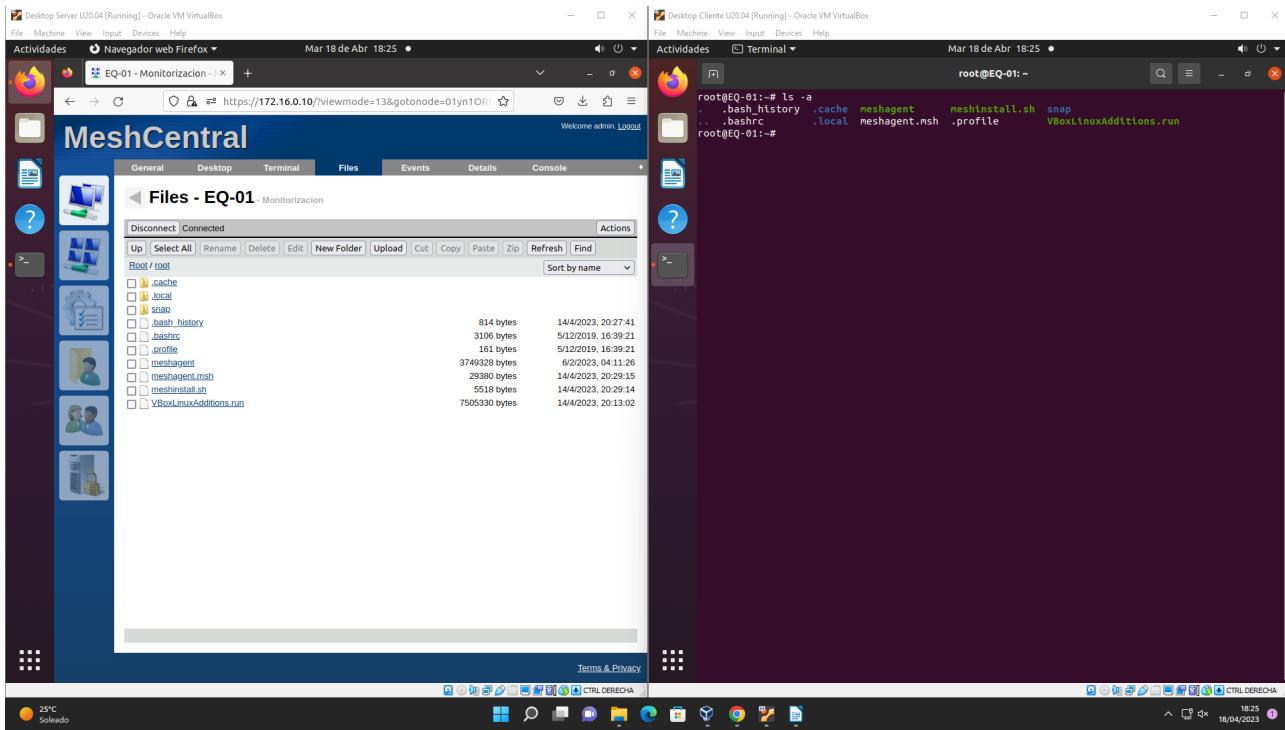


Do servidor a máquina Windows 10

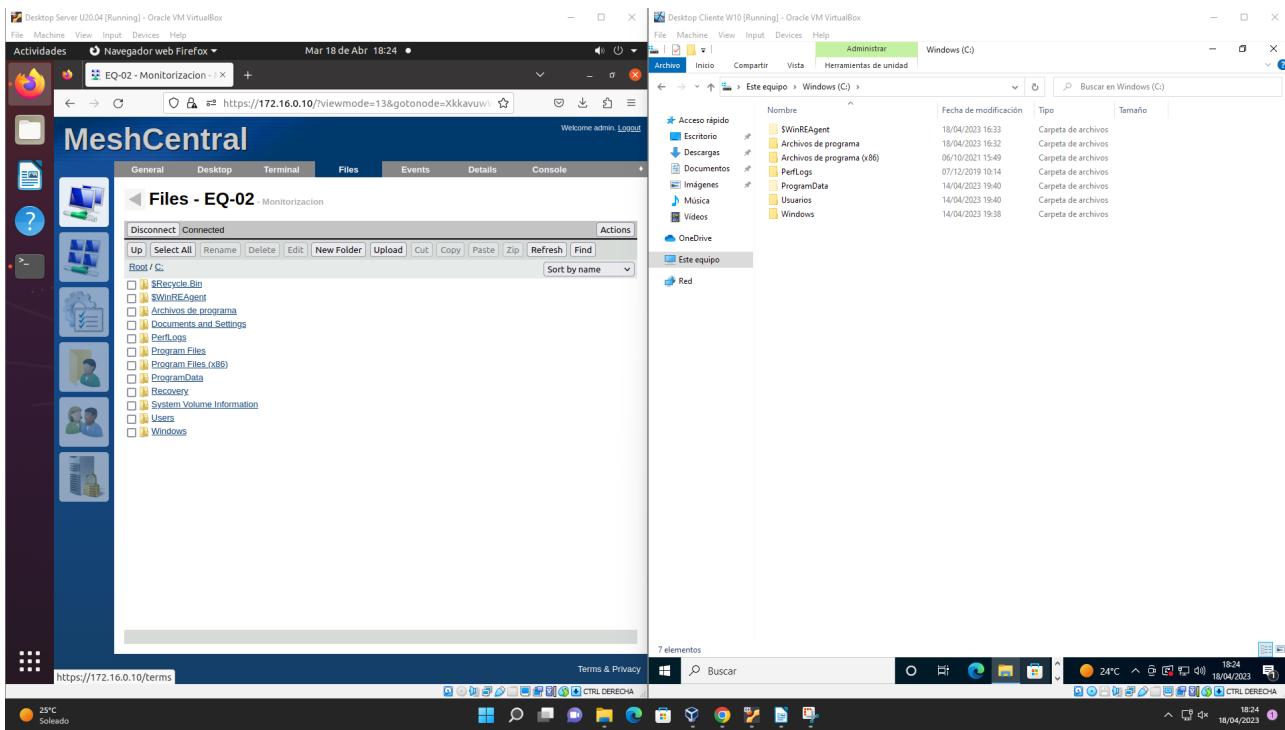


Acceso a archivos

Do servidor a máquina Ubuntu 20.04



Do servidor a máquina Windows 10



Ver os eventos do equipo

Ubuntu 20.04

Actividades Navegador web Firefox • Mar 18 de Abr 18:27 • Welcome admin. Logout

General Desktop Terminal Files Events Details Console

Events - EQ-01 - Monitorizacion

18/04/2023

- 18:26:52 - admin - Processing console command: "help"
- 18:26:56 - admin - Started remote files without notification
- 18:26:56 - admin - Started file management session "obzvnhs3olm" from 172.16.0.10 to 172.16.0.20
- 18:26:56 - admin - Ended file management session "obzvnhs3olm" from 172.16.0.10 to 172.16.0.20, 94 second(s)
- 18:28:45 - admin - Ended terminal session "yedgywaf1r" from 172.16.0.10 to 172.16.0.20
- 18:28:45 - admin - Ended desktop session "qbsptdewav" from 172.16.0.10 to 172.16.0.20, 196 second(s)
- 18:33:44 - admin - Started remote desktop without notification
- 18:33:44 - admin - Started desktop session "qbsptdewav" from 172.16.0.10 to 172.16.0.20
- 18:40:23
- 18:50:47 - admin - Started remote desktop without notification
- 18:50:47 - admin - Started desktop session "oijfuh3p65p" from 172.16.0.10 to 172.16.0.20
- 18:54:09 - admin - Ended desktop session "oijfuh3p65p" from 172.16.0.10 to 172.16.0.20, 719 second(s)
- 18:54:09 - admin - Ended terminal session "yedgywaf1r" from 172.16.0.10 to 172.16.0.20, 592 second(s)
- 18:44:09 - admin - Ended file management session "yedq4t43nr" from 172.16.0.10 to 172.16.0.20, 656 second(s)
- 18:35:45 - admin - Displaying message box, title="MeshCentral", message="Hola mundo!"
- 18:35:10 - admin - Displaying message box, title="MeshCentral", message="Hola mundo!"
- 18:34:54 - admin - Displaying message box, title="MeshCentral", message="Hola mundo!"
- 18:34:15 - admin - Started remote desktop session "yedq4t43nr" from 172.16.0.20 to 172.16.0.10
- 18:33:12 - admin - Started remote desktop without notification
- 18:33:12 - admin - Started file management session "yedq4t43nr" from 172.16.0.10 to 172.16.0.20
- 18:32:55 - admin - Changed device EQ-01 from group Monitorizacion: description
- 18:32:09 - admin - Started remote desktop without notification
- 18:32:09 - admin - Started desktop session "oijfuh3p65p" from 172.16.0.10 to 172.16.0.20
- 18:31:46 - admin - Displaying message box, title="MeshCentral", message="Ola"

Show Last 60

Terms & Privacy

25°C Soleado 18:27 18/04/2023 CTRL DERECHA

Windows 10

Actividades Navegador web Firefox • Mar 18 de Abr 18:27 • Welcome admin. Logout

General Desktop Terminal Files Events Details Console

Events - EQ-02 - Monitorizacion

18/04/2023

- 18:24:54 - admin - Ended file management session "gbicalat06" from 172.16.0.10 to 172.16.0.30, 120 second(s)
- 18:24:54 - admin - Ended terminal session "l0lvomes8" from 172.16.0.10 to 172.16.0.30, 214 second(s)
- 18:22:43 - admin - Started remote files without notification
- 18:22:43 - admin - Started file management session "gbicalat06" from 172.16.0.10 to 172.16.0.30
- 18:22:43 - admin - Started terminal session "l0lvomes8" from 172.16.0.10 to 172.16.0.30
- 18:21:19 - admin - Started terminal session "nksam2sg2s" from 172.16.0.10 to 172.16.0.30
- 16:31:05 - admin - Ended desktop session "nksam2sg2s" from 172.16.0.10 to 172.16.0.30, 37 second(s)
- 16:30:27 - admin - Started remote desktop without notification
- 16:30:27 - admin - Started desktop session "nksam2sg2s" from 172.16.0.10 to 172.16.0.30
- 16:30:25 - admin - Started file management session "nksam2sg2s" from 172.16.0.10 to 172.16.0.30
- 14:04/2023
- 18:50:39 - admin - Ended desktop session "m63tg6yq6m" from 172.16.0.10 to fe80::b01e:11ef::751:384@tcp0s3, 145 second(s)
- 18:50:39 - admin - Ended file management session "semic2pcodc" from 172.16.0.10 to fe80::b01e:11ef::751:384@tcp0s3, 5 second(s)
- 18:50:33 - admin - Started remote files without notification
- 18:50:33 - admin - Started file management session "semic2pcodc" from 172.16.0.10 to fe80::b01e:11ef::751:384@tcp0s3
- 18:50:21 - admin - Displaying message box, title="MeshCentral", message="Pillan a lola lolla fumando en un bar!"
- 18:49:27 - admin - Displaying message box, title="MeshCentral", message="Pillan a lola lolla fumando en un bar!"
- 18:48:13 - admin - Started remote desktop without notification
- 18:48:13 - admin - Started desktop session "m63tg6yq6m" from 172.16.0.10 to fe80::b01e:11ef::751:384@tcp0s3
- 18:48:08 - admin - Changed device EQ-02 from group Monitorizacion: os: desc

Show Last 60

Terms & Privacy

25°C Soleado 18:27 18/04/2023 CTRL DERECHA

Ver os detalles de cada equipo

Ubuntu 20.04

The screenshot shows the MeshCentral interface running on a desktop environment. The main window displays detailed information for a device named "EQ-01". The details include:

- Operating System:** Name: Ubuntu, Version: 20.04.6 LTS, Vendor: innotek GmbH, Version: VirtualBox 0.1.2, Architecture: Linux 64bit, Connected now: 172.16.0.20, Last agent connection: 21/11/2022, 14:58:51.
- Networking:** enp0s3, MAC Layer, IPv4 Layer, IPv6 Layer.
- BIOS:** Vendor: Oracle Corporation, Version: VirtualBox 0.1.2.
- Motherboard:** Vendor: Oracle Corporation, Version: VirtualBox 0.1.2, Identifier: 121d9e20-d1df-6845-8329-0772e140111, CPU: Intel® Core™ i7-10700 CPU @ 2.90GHz, GPU: VMware SVGA II Adapter.
- Storage:** ATA Disk.

The interface has tabs for General, Desktop, Terminal, Files, Events, Details, and Console. The Details tab is selected. The title bar shows the URL https://172.16.0.10/?viewmode=17&gonode=01y10RNaih2Bjwbj3gzgXu24wE9ExLl6lrOQSv5c@jxDGYoRdapDPUPVZXFaWc. The status bar at the bottom right shows the date and time as Mar 18 de Abr 18:28 • 18/04/2023.

Windows 10

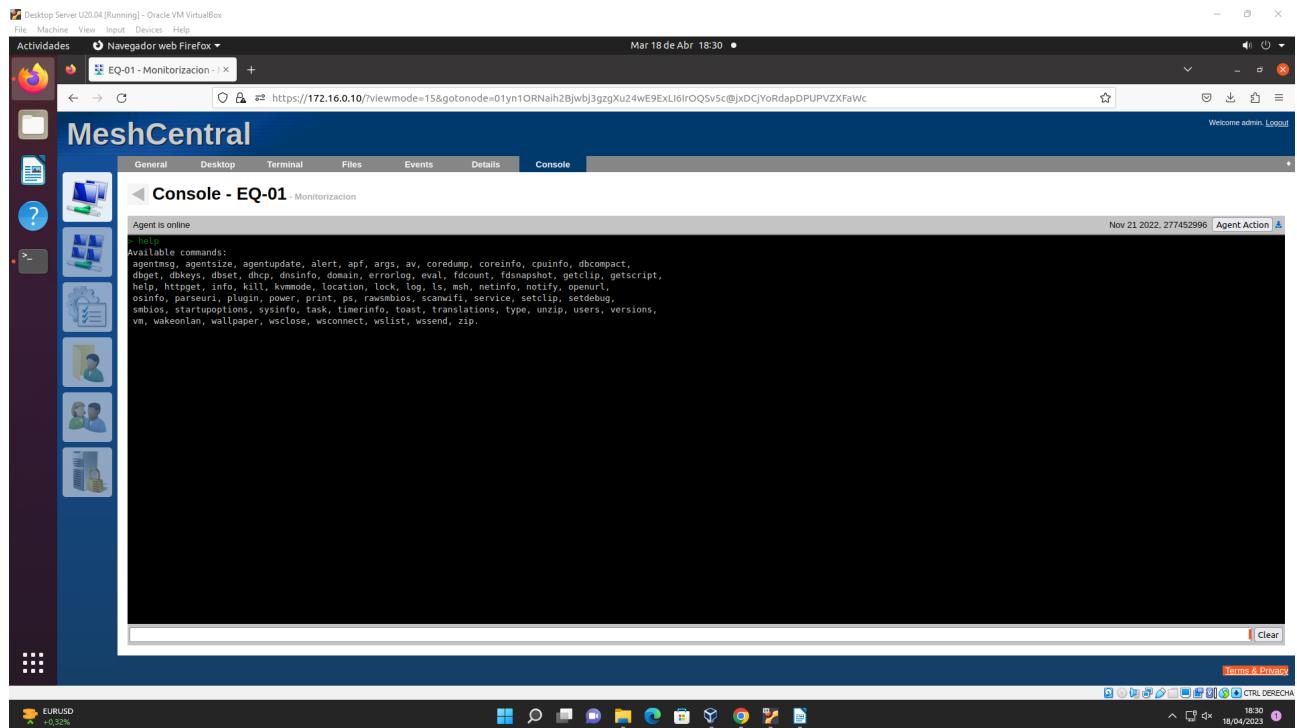
The screenshot shows the MeshCentral interface running on a Windows 10 desktop environment. The main window displays detailed information for a device named "EQ-02". The details include:

- Operating System:** Name: Microsoft Windows 10 Pro - 21H2/19044, Version: 64-bit, Vendor: innotek GmbH, Version: VirtualBox 0.1.2, Architecture: Windows 64bit service, Connected now: 172.16.0.30, Last agent connection: 9/12/2022, 12:12:34.
- Networking:** Ethernet, MAC Layer, IPv6 Layer, IPv4 Layer.
- BIOS:** Vendor: Oracle Corporation, Version: VirtualBox 0.1.2.
- Motherboard:** Vendor: Oracle Corporation, Version: VirtualBox 0.1.2, Identifier: 79CFBB7B-9D5B-46A2-824F-EEBE156E241C, CPU: Intel® Core™ i7-10700 CPU @ 2.90GHz, GPU: VirtualBox Graphics Adapter (WDDM).

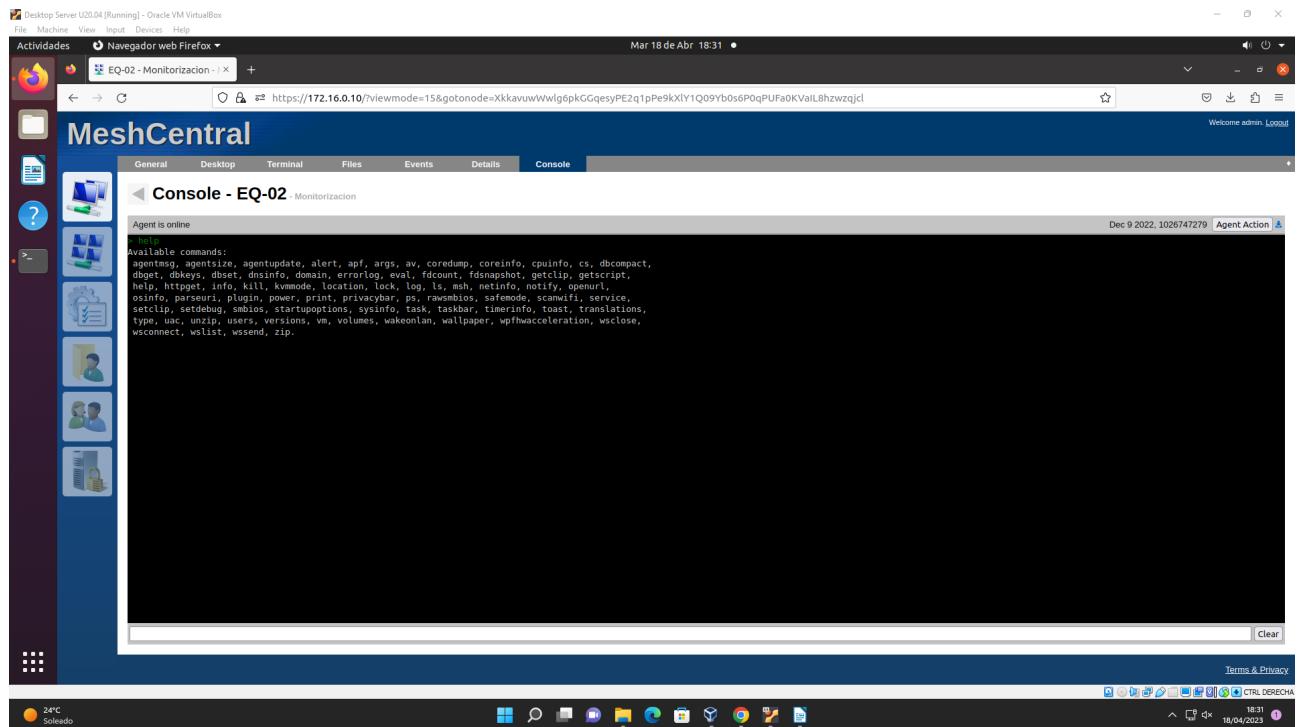
The interface has tabs for General, Desktop, Terminal, Files, Events, Details, and Console. The Details tab is selected. The title bar shows the URL https://172.16.0.10/?viewmode=17&gonode=XkkavuwWwl6pkGGqesyPE2q1pPe9kXlY1Q09Yb0s6P0qPUFa0KVaI8hzwzqjcl. The status bar at the bottom right shows the date and time as Mar 18 de Abr 18:28 • 18/04/2023.

Acceso a consola

Ubuntu 20.04



Windows 10



Opciones de My Account

The screenshot shows the MeshCentral web interface with the URL <https://172.16.0.10/viewmode=2>. The main content area displays the 'My Account' section, which includes account actions like Localization Settings, Notification Settings, Change email address, Change password, Delete account, and Create login token. To the right is a placeholder for a profile picture with a 'Change Image' link. On the left sidebar, there are icons for File, Machine, View, Input, Devices, Help, and a question mark. Below the sidebar, a 'Device Groups' section lists 'Monitorizacion' with 'Full Administrator' privileges. The bottom of the screen shows a Windows taskbar with various pinned icons and system status.

Opciones de My Events

Acceso aos eventos do servidor

The screenshot shows the MeshCentral web interface with the URL <https://172.16.0.10/viewmode=3>. The main content area displays the 'Events' section, listing numerous log entries from March 18, 2023. The entries include various system and user activities such as file management sessions, terminal sessions, and user group changes. The log entries are timestamped and categorized by user and event type (e.g., EO-01, EO-02). The left sidebar and bottom taskbar are identical to the 'My Account' screenshot.

Acceso a visualización e creación de reportes

The screenshot shows the MeshCentral web interface. In the top navigation bar, there are tabs for 'Actividades' (Activities), 'Navegador web Firefox' (Web Browser Firefox), and 'MeshCentral'. The URL in the address bar is <https://172.16.0.10/?viewmode=60>. The date and time are Mar 18 de Abr 18:34. On the right side of the header, there are links for 'Welcome admin' and 'Logout'. The main content area is titled 'My Reports' and contains a table with two rows of data. The columns are 'Time', 'User', 'Session', 'Length', 'Bytes In', and 'Bytes Out'. The first row shows a session for 'Monitorizacion' at '18/4/2023, 16:31:05' by 'admin' on a 'Desktop' session, lasting 00:00:37 with 174518 bytes in and 170646 bytes out. The second row shows another session for 'Monitorizacion' on a 'Desktop' session, also lasting 00:00:37 with 174518 bytes in and 170646 bytes out. A 'Generate Report...' button is located above the table. The left sidebar has icons for Events, Reports, and other system functions. The bottom status bar shows the temperature as 24°C and the date as 18/04/2023.

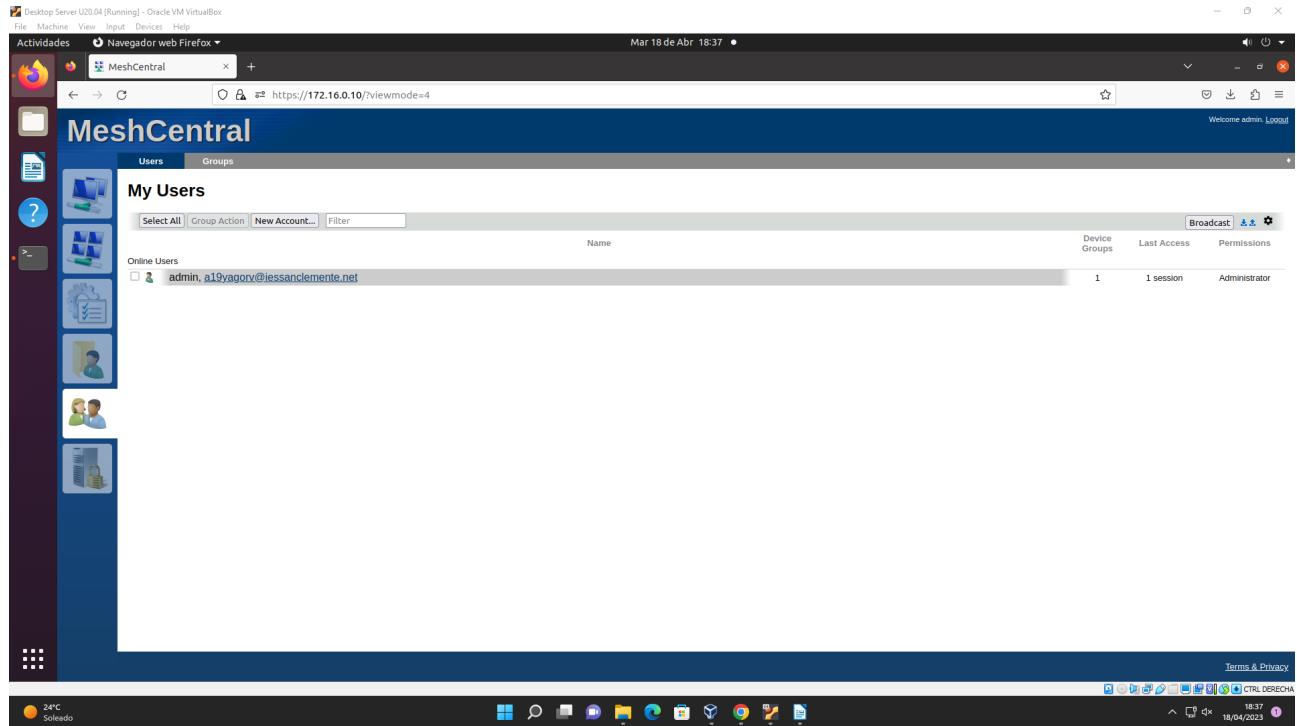
Opciones de My Files

Control total dos archivos do servidor

The screenshot shows the MeshCentral web interface. The layout is identical to the previous one, with the 'Actividades' tab selected in the top navigation bar. The URL is <https://172.16.0.10/?viewmode=5>. The main content area is titled 'My Files' and displays a file tree under the 'Root' directory. The tree shows 'My_Files' and 'Monitorizacion' as subfolders. At the top of the file list, there is a toolbar with buttons for Up, Select All, Rename, Delete, Edit, New Folder, Upload, Cut, Copy, and Paste. To the right of the toolbar, there is a 'Sort by name' dropdown menu. The bottom status bar shows the date as 18/04/2023 and the time as 18:36.

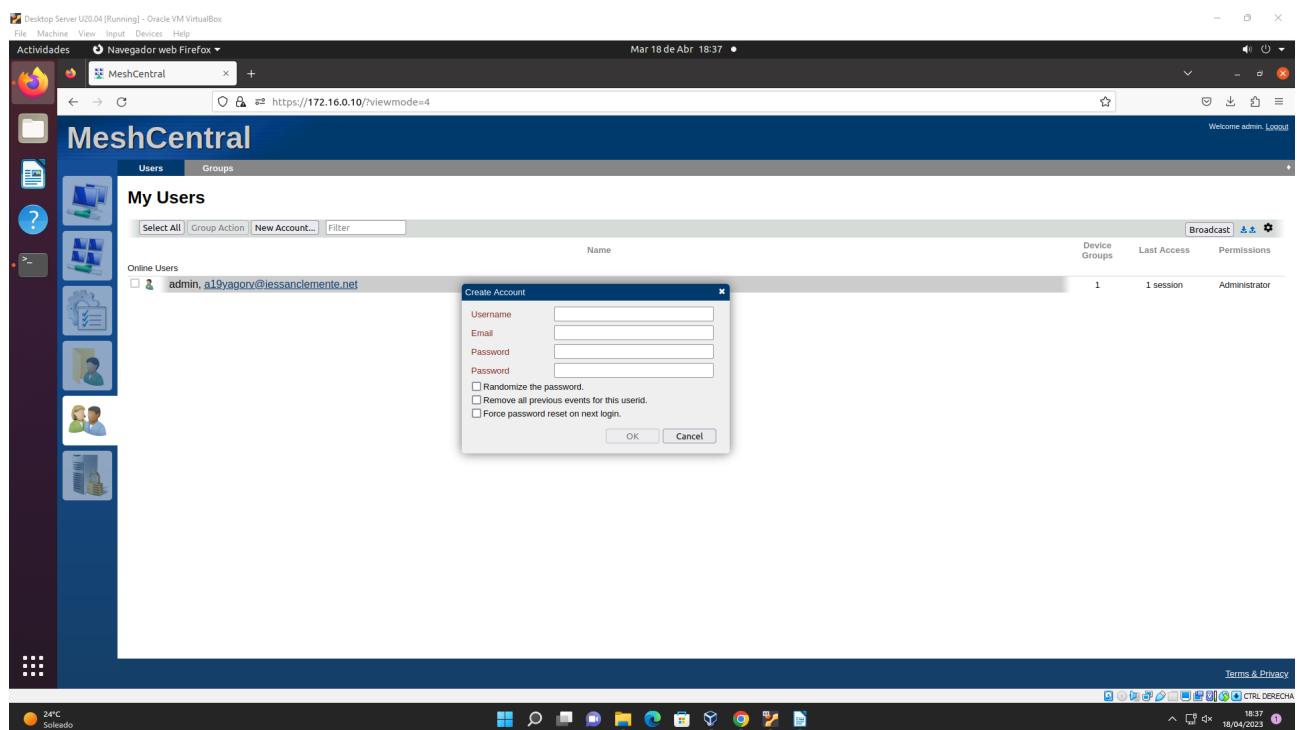
Opciones de My Users

Visualización de usuarios



The screenshot shows the MeshCentral web interface running in a Firefox browser window. The title bar indicates the window is titled 'Navegador web Firefox' and the URL is 'https://172.16.0.10/?viewmode=4'. The main content area is titled 'My Users' and displays a table of users. The table has columns for 'Name', 'Device Groups', 'Last Access', and 'Permissions'. One user, 'admin, a19yagory@iessanclemente.net', is listed with 1 device group, 1 session, and Administrator permissions. On the left side, there is a sidebar with various icons for file management, devices, and system status. The bottom of the screen shows the Windows taskbar with several pinned icons.

Creación de usuarios



The screenshot shows the MeshCentral web interface running in a Firefox browser window. The title bar indicates the window is titled 'Navegador web Firefox' and the URL is 'https://172.16.0.10/?viewmode=4'. The main content area is titled 'My Users' and displays a table of users. A 'New Account...' button is visible in the top navigation bar. A 'Create Account' dialog box is open in the foreground, prompting for 'Username', 'Email', and 'Password'. There are also three checkboxes: 'Randomize the password.', 'Remove all previous events for this user.', and 'Force password reset on next login.' The 'OK' and 'Cancel' buttons are at the bottom of the dialog. The left sidebar and Windows taskbar are visible at the bottom of the screen.

Edición de usuarios creados

Actividades Navegador web Firefox Mar 18 de Abr 18:37

MeshCentral

General Events

General - admin

Domain Default

User Identifier user/admin

Email a10yagon@lessandlemente.net

Real Name Not set

Features None

Server Rights Full administrator

Creation 14/4/2023, 17:56:54

Last Login 18/4/2023, 16:29:32

Device Groups 1 group

Admin Realms None

User Consent None

Notes

Common Device Groups

Monitización Full Rights

Add User Group

User Group Memberships No user group memberships

Add Device

Common Devices No devices in common

Change Password Previous Logins

1 active session

Delete User Terms & Privacy

24°C Soleado 18:37 18/04/2023 CTRL DERECHA

Opcións de My Server

Acceso ao estado xeral do servidor

Actividades Navegador web Firefox Mar 18 de Abr 18:42

MeshCentral

General Stats Console Trace

My Server

Server actions

Download server backup
Restore server with backup
Check server version
Show server error log

Server Statistics

CPU Load 0.01.0 Available Memory 131.7 Mb free, 969.6 Mb total

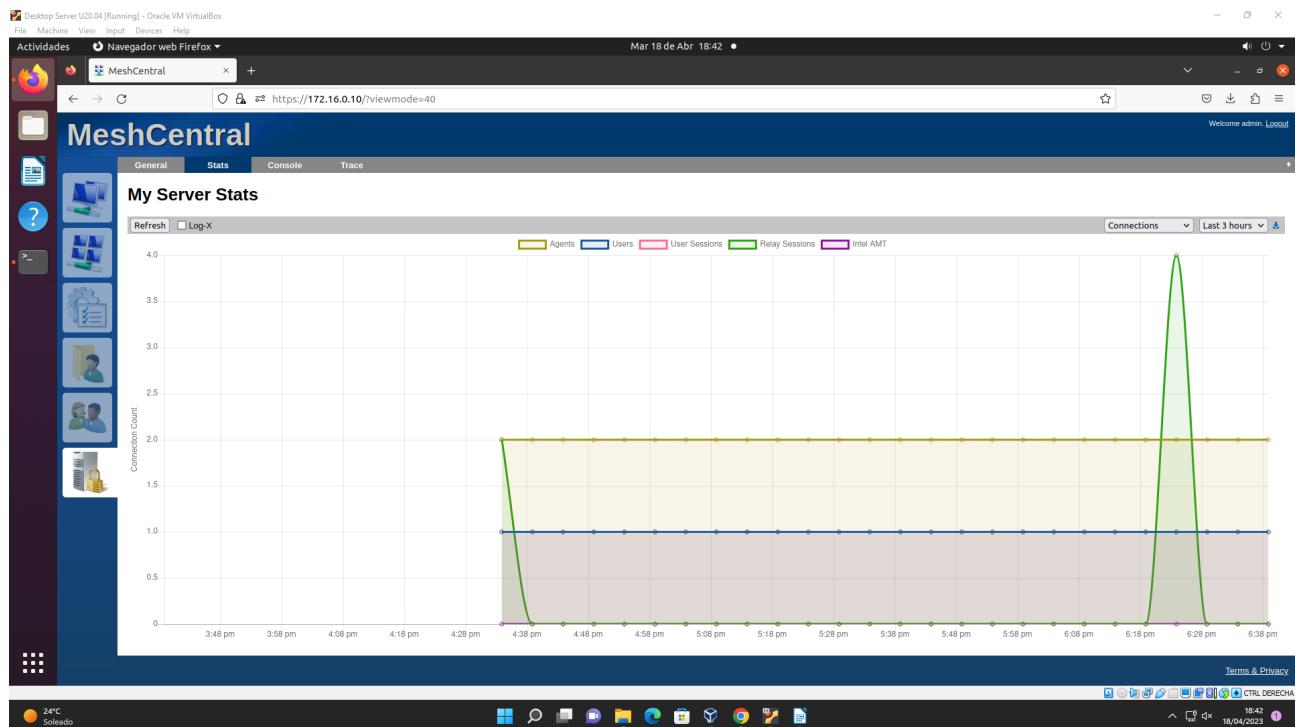
Server State

User Accounts	1	Device Groups	1	Agent Sessions	2	Connected Users	1	Users Sessions	1
Relay Sessions	0	Relay Count	0	Connected Intel® AMT	0				

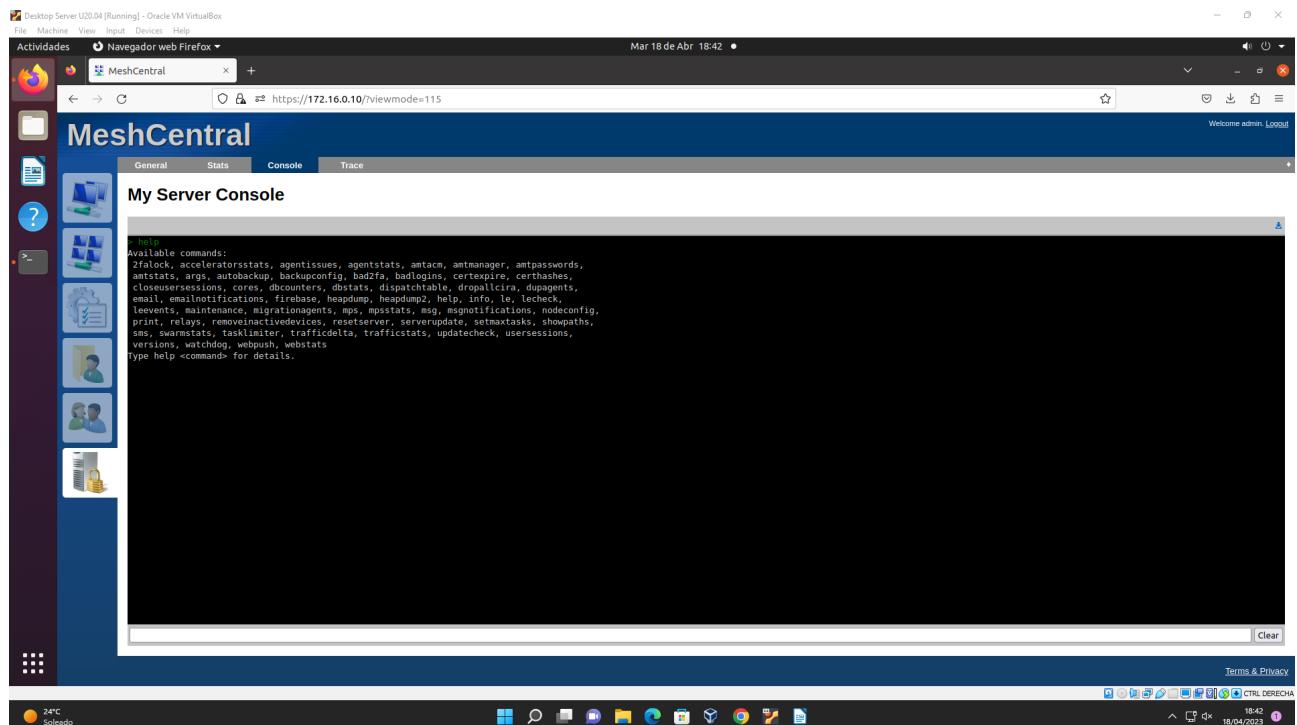
Terms & Privacy

24°C Soleado 18:42 18/04/2023 CTRL DERECHA

Acceso as estadísticas do servidor



Acceso a consola do servidor



Acceso ao trazado do servidor

The screenshot shows the MeshCentral interface running on a Windows desktop. The main window title is "Navegador web Firefox" and the URL is "https://172.16.0.10/?viewmode=41". The title bar also includes "Actividades" and "Welcome admin, Logout". The interface has a dark blue header with tabs: General, Stats, Console, and Trace. The "Trace" tab is selected. A sidebar on the left contains icons for File, Machine, View, Input, Devices, Help, and a question mark. Below the sidebar is a vertical stack of icons: a lock, a user profile, a document, a gear, a network, a person, and a lock. The main content area displays the "My Server Tracing" dialog box. The dialog has a title bar "Server Tracing" and two sections: "Core Server" and "Intels AMT". Under "Core Server", the following items are listed with checkboxes: Cookie encoder, Message Dispatcher, MeshServer Messages, Mesh-Server Peerings, Mesh-Agent traffic, Mesh-Agent update, Server Certificate, Server Database, and Email/SMS/Push Traffic. Under "Intels AMT", the following items are listed with checkboxes: Intel AMT manager, Connection Relay, CIRA Server, and CIRA Server Commands. At the bottom of the dialog are three buttons: Delete, OK, and Cancel.

Mar 18 de Abr 18:42

Welcome admin, Logout

General Stats Console Trace

Show Last 100 Clear

Server Tracing

Core Server

- Cookie encoder
- Message Dispatcher
- MeshServer Messages
- Mesh-Server Peerings
- Mesh-Agent traffic
- Mesh-Agent update
- Server Certificate
- Server Database
- Email/SMS/Push Traffic

Delete OK Cancel

Intels AMT

- Intel AMT manager
- Connection Relay
- CIRA Server
- CIRA Server Commands

Delete OK Cancel

Terms & Privacy

24°C Soleado

Mar 2 de Mai 17:57

Welcome admin, Logout

General Stats Console Trace

Show Last 100 Clear

Server Tracing

Core Server

- Web Server
- Web Server Requests
- Web Server Response
- Web Server Headers
- User Authentication Log

Intels AMT

- Intel AMT manager
- Connection Relay
- CIRA Server
- CIRA Server Commands

Delete OK Cancel

Terms & Privacy

28°C Part. soleado

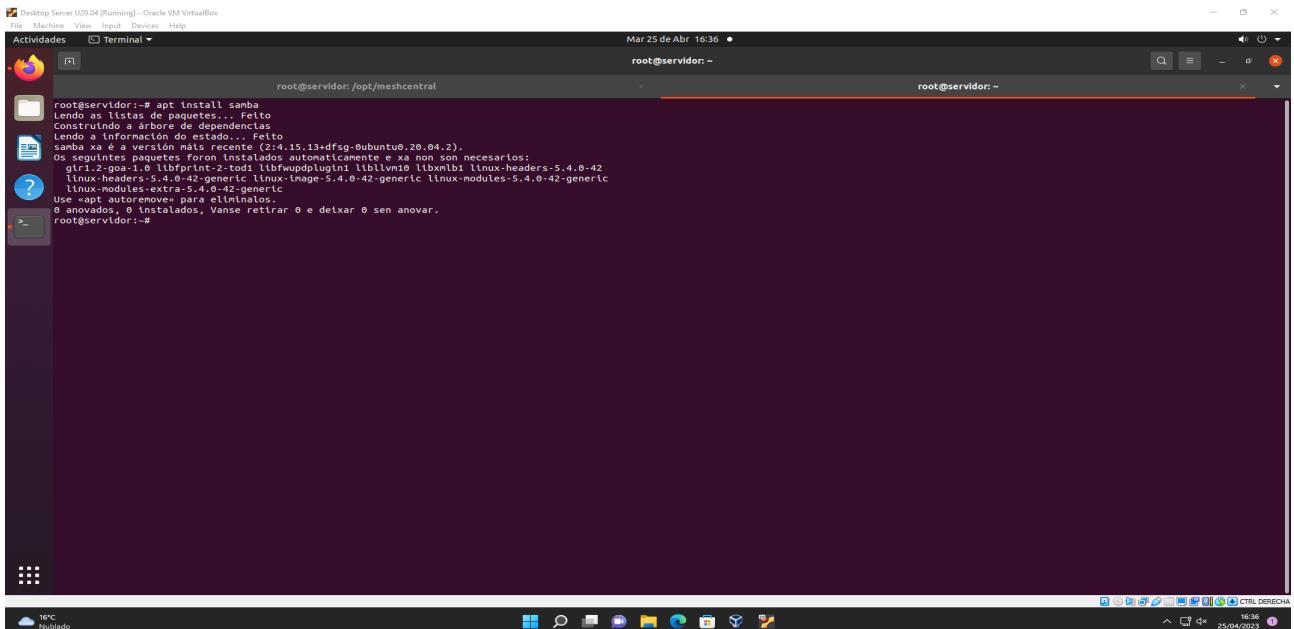
Agregados

Creación e compartición da carpeta Común mediante Samba

Creación e particion no servidor

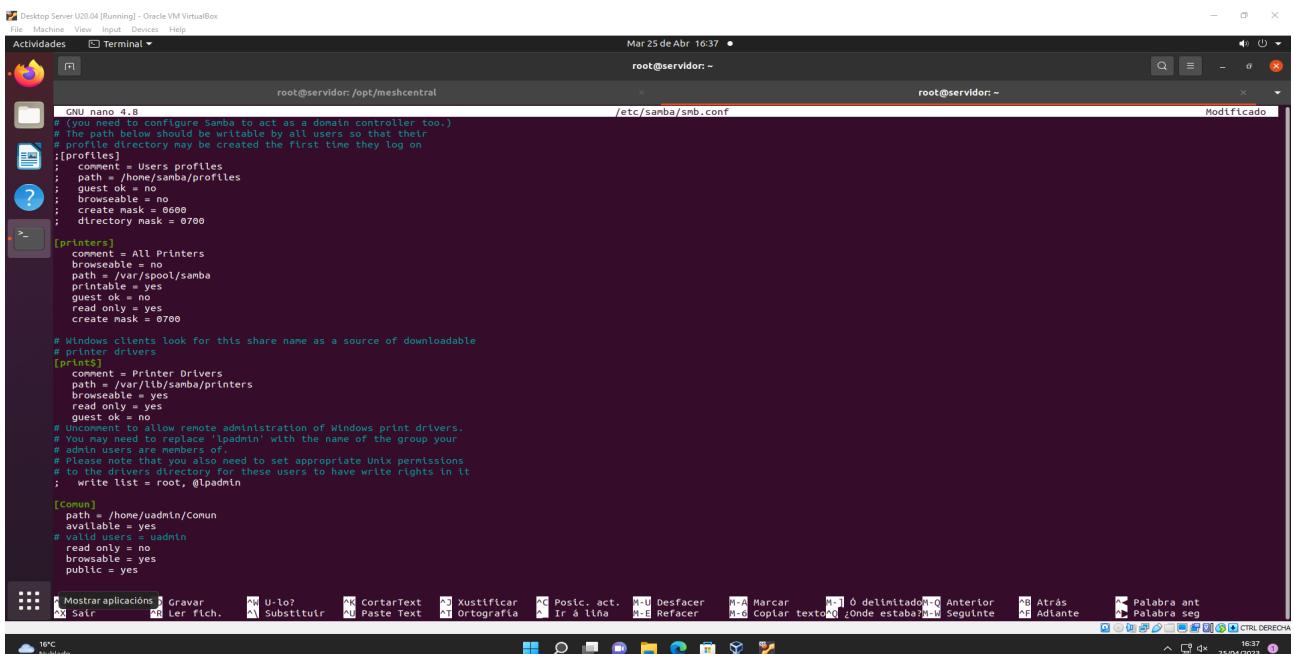
Unha vez realizado todos os pasos, para reducir os tempos de transpasos de arquivos/ficheiros entre equipos crearemos unha carpeta común e compartiremola mediante Samba. O primeiro paso é instalar Samba, un software libre que permite a interoperabilidade entre sistemas operativos implementando o protocolo SMB(Server Message Block):

```
apt install samba
```



Seguido desto, abrimos o ficheiro `/etc/samba/smb.conf` e engadimos unhas lineas de codigo correspondentes coa carpeta de Comun creada con anterioridade debaixo do home de uadmin e faremola publica para evitar o uso consecutivo de credenciais para acceder a carpeta:

`nano /etc/samba/smb.conf`



Unha vez rematado este paso, reiniciaremos o servizo de samba (`service smbd restart`) e o noso equipo servidor xa estará listo, xa só nos faltaría configurar o equipo cliente.

Configuración do cliente Ubuntu Desktop 18.04 para Común

Para configurar o equipo cliente necesitaremos os paquetes `samba-common`, `smbclient` e `cifs-utils`

`apt install samba-common smbclient cifs-utils`

```
Desktop Cliente U20.04 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Actividades Terminal Mar 25 de Abr 16:41 •
root@EQ-01: ~
Preparando o desempaquetado de .../2-clfs-utils_2%3a6.9~1ubuntu0.2_amd64.deb...
Desempaquetando clfs-utils (2:6.9~1ubuntu0.2)...
Seleccionando o paquete python3-crypto non seleccionado anteriormente.
Preparando o desempaquetado de .../3-python3-crypto_2.6.1-1ubuntu2_amd64.deb...
Desempaquetando python3-crypto (2:6.1-1ubuntu2)...
Seleccionando o paquete python3-gpg non seleccionado anteriormente.
Preparando o desempaquetado de .../4-python3-gpg_1.13.1~7ubuntu2_amd64.deb...
Desempaquetando python3-gpg (1.13.1~7ubuntu2)...
Seleccionando o paquete python3-tdb non seleccionado anteriormente.
Preparando o desempaquetado de .../5-python3-tdb_1.4.5~1ubuntu0.20.04.1_amd64.deb...
Desempaquetando python3-tdb (1.4.5~1ubuntu0.20.04.1)...
Seleccionando o paquete python3-samba non seleccionado anteriormente.
Preparando o desempaquetado de .../6-python3-samba_2%3a4.15.13+dfsg~1ubuntu0.20.04.2_amd64.deb...
Desempaquetando python3-samba (2:4.15.13+dfsg~1ubuntu0.20.04.2)...
Seleccionando o paquete samba-common-bin non seleccionado anteriormente.
Preparando o desempaquetado de .../7-samba-common-bin_2%3a4.15.13+dfsg~1ubuntu0.20.04.2_amd64.deb...
Desempaquetando samba-common-bin (2:4.15.13+dfsg~1ubuntu0.20.04.2)...
Seleccionando o paquete samba-dsdb-modules:amd64 non seleccionado anteriormente.
Preparando o desempaquetado de .../8-samba-dsdb-modules_2%3a4.15.13+dfsg~1ubuntu0.20.04.2_amd64.deb...
Desempaquetando samba-dsdb-modules:amd64 (2:4.15.13+dfsg~1ubuntu0.20.04.2)...
A configurar clfs-utils (2:6.9~1ubuntu0.2) ...
update-alternatives: usando /usr/lib/x86_64-linux-gnu/clfs-utils/lmapw.so para proveir /etc/clfs-utils/lmap-plugin (lmap-plugin) en auto modo
A configurar samba-common (2:4.15.13+dfsg~1ubuntu0.20.04.2) ...
Creating config file /etc/samba/smb.conf with new version
A configurar python3-tdb (1.4.5~1ubuntu0.20.04.1) ...
A configurar python3-gpg (1.13.1~7ubuntu2) ...
A configurar smbclient (2:4.15.13+dfsg~1ubuntu0.20.04.2) ...
A configurar python3-crypto (2.6.1-1ubuntu2) ...
A configurar python3-dsdb-modules:amd64 (2:4.15.13+dfsg~1ubuntu0.20.04.2) ...
A configurar samba-dsdb-modules (2:4.15.13+dfsg~1ubuntu0.20.04.2) ...
A configurar samba-common-bin (2:4.15.13+dfsg~1ubuntu0.20.04.2) ...
Checking smb.conf with testparm
Load smb config files from /etc/samba/smb.conf
Loaded services file OK.
Weak crypto is allowed
Server role: ROLE_STANDALONE

Done
Processando os disparadores de man-db (2.9.1-1)...
Processando os disparadores de libc-bin (2.31~1ubuntu9.9)...
root@EQ-01:~# apt install samba-common smbclient clfs-utils
```

A continuación conectaremos mediante smbclient a IP do servidor para ver os seus recursos compartidos, se se atopa Comun entre eles, a configuración anterior fixose correctamente:

```
smbclient -L //172.16.0.10
```

Co cal procederemos ao montaxe de Comun en /mnt/Comun, carpeta creada con anterioridade no cliente, unha vez comprobado que o montaxe non nos deu ningun tipo de problema desmontamos outra vez a carpeta.

```
mkdir /mnt/Comun
```

```
mount -t cifs //172.16.0.10/Comun /mnt/Comun -o username=uadmin
```

```
mount -a
```

```
umount /mnt/Comun
```

The screenshot shows a terminal window titled "Terminal" with the command history and output as follows:

```
root@EQ-01:~# smbclient -L //172.16.0.10
Password for [WORKGROUP\root]:
[sharename      type      comment]
[print$          Disk      Printer Drivers
[Comun          Disk      Printer Drivers
[IPC$           IPC       IPC Service (servidor server (Samba, Ubuntu))
SMB1 disabled -- no workgroup available
root@EQ-01:~# mkdir /mnt/Comun
root@EQ-01:~# mount -t cifs //172.16.0.10/Comun /mnt/Comun -o username=uadmin
Password for uadmin@//172.16.0.10/Comun: *****
root@EQ-01:~# mount -a
root@EQ-01:~# umount /mnt/Comun
root@EQ-01:~#
```

The terminal is running on a desktop environment with a dark theme. The desktop bar at the bottom shows various icons and the system status.

Editamos o ficheiro fstab para a montaxe automatica da carpeta Comun:

```
nano /etc/fstab
```

Unha vez introducido os datos como aparecen na imaxe, identifcaremos un ficheiro non creado, /etc/credenciales.txt, que se creará a posteriori co seguinte contido para o seu funcionamento:

nano /etc/credentials.txt

user=uadmin

password=abc123.

Unha vez feito este paso, montamos con mount e observamos ao final do comando a carpeta montada //172.16.0.10/Comun on /mnt/Comun type cifs(...) e procederemos a desmontala unha vez máis

```
Desktop Client U2.04 [Running] - Oracle VM VirtualBox  
File Machine View Input Devices Help  
Actividades Terminal Mar 25 de Abr 16:51 •  
root@EQ-01:~  
  
tmpfs on /run type tmpfs (rw,nosuid,nodev,noexec,relatime,size=99284k,mode=755,inode64)  
/dev/sda5 on / type ext4 (rw,relative,errors=remount-ro)  
securityfs on /sys/kernel/security type securityfs (rw,nosuid,nodev,noexec,relatime)  
tmpfs on /run/lock type tmpfs (rw,nosuid,nodev,noexec,mode=755,inode64)  
tmpfs on /sys/fs/cgroup type tmpfs (rw,nosuid,nodev,noexec,mode=755,inode64)  
cgroup2 on /sys/fs/cgroup/unified type cgroup2 (rw,nosuid,nodev,noexec,relatime,nsdelegate)  
cgroup on /sys/fs/cgroup/systemd type cgroup (rw,nosuid,nodev,noexec,relatime,xattr,name=systemd)  
pstree on /sys/fs/pstree type pstree (rw,nosuid,nodev,noexec,relatime)  
bpf on /sys/fs/bpf type bpf (rw,nosuid,nodev,noexec,relatime,mode=700)  
cgroup on /sys/fs/cgroup/cpuset type cgroup (rw,nosuid,nodev,noexec,relatime,cpuset)  
cgroup on /sys/fs/cgroup/cpusetcgroup type cgroup (rw,nosuid,nodev,noexec,relatime,net_cls,net_prio)  
cgroup on /sys/fs/cgroup/cpu,cpuacct type cgroup (rw,nosuid,nodev,noexec,relatime,pids)  
cgroup on /sys/fs/cgroup/micsc type cgroup (rw,nosuid,nodev,noexec,relatime,micsc)  
cgroup on /sys/fs/cgroup/freezer type cgroup (rw,nosuid,nodev,noexec,relatime,freezer)  
cgroup on /sys/fs/cgroup/perf_event type cgroup (rw,nosuid,nodev,noexec,relatime,perf_event)  
cgroup on /sys/fs/cgroup/bikko type cgroup (rw,nosuid,nodev,noexec,relatime,bikko)  
cgroup on /sys/fs/cgroup/blkio type cgroup (rw,nosuid,nodev,noexec,relatime,blkio)  
cgroup on /sys/fs/cgroup/devices type cgroup (rw,nosuid,nodev,noexec,relatime,devices)  
cgroup on /sys/fs/cgroup/rdma type cgroup (rw,nosuid,nodev,noexec,relatime,rdma)  
cgroup on /sys/fs/cgroup/memory type cgroup (rw,nosuid,nodev,noexec,relatime,memory)  
systemd-1 on /proc/sys/fs/binfmt_misc type autos (rw,relative,fds=28,prgr=1,timeout=0,minproto=5,maxproto=5,direct,pipe_ino=15565)  
tracefs on /sys/kernel/tracing type tracefs (rw,nosuid,nodev,noexec,relatime)  
debugfs on /sys/kernel/debug type debugfs (rw,nosuid,nodev,noexec,relatime)  
request on /sys/kernel/debug/request_type type request_type (rw,nosuid,nodev,noexec,relatime)  
hugepages on /dev/hugepages type hugepages (rw,relative,page size=2M)  
[var/lib/snaps/bare_5.snap on /snap/bare_5/] type squashfs (ro,nodev,relative,errors=continue,x-gdu.hide)  
[var/lib/snaps/core18_1880.snap on /snap/core18/1880] type squashfs (ro,nodev,relative,errors=continue,x-gdu.hide)  
[var/lib/snaps/core20_1852.snap on /snap/core20/1852] type squashfs (ro,nodev,relative,errors=continue,x-gdu.hide)  
[var/lib/snaps/core21_2721.snap on /snap/core18/2721] type squashfs (ro,nodev,relative,errors=continue,x-gdu.hide)  
[var/lib/snaps/gnome-3-34-1804_36.snap on /snap/gnome-3-34-1804/36] type squashfs (ro,nodev,relative,errors=continue,x-gdu.hide)  
[var/lib/snaps/gnome-3-34-1804_37.snap on /snap/gnome-3-34-1804/37] type squashfs (ro,nodev,relative,errors=continue,x-gdu.hide)  
[var/lib/snaps/gtk-common-themes_1586.snap on /snap/gtk-common-themes/1586] type squashfs (ro,nodev,relative,errors=continue,x-gdu.hide)  
[var/lib/snaps/gtk-common-themes_1535.snap on /snap/gtk-common-themes/1535] type squashfs (ro,nodev,relative,errors=continue,x-gdu.hide)  
[var/lib/snaps/snappy-store_467.snap on /snap/snappy-store/467] type squashfs (ro,nodev,relative,errors=continue,x-gdu.hide)  
[var/lib/snaps/snappy-store_638.snap on /snap/snappy-store/638] type squashfs (ro,nodev,relative,errors=continue,x-gdu.hide)  
[var/lib/snaps/snappy-store_18596.snap on /snap/snappy-store/18596] type squashfs (ro,nodev,relative,errors=continue,x-gdu.hide)  
[var/lib/snaps/snappy-store_18596.snap on /snap/snappy-store/18596] type squashfs (ro,nodev,relative,errors=continue,x-gdu.hide)  
binfmt_misc on /proc/kernel type configfs (rw,nosuid,nodev,noexec,relatime)  
/dev/sda1 on /boot/efi type vfat (rw,relative,fsblksize=0x0077,dsmask=0x0077,codepage=437,tocharset=iso8859-1,shortname=mixed,errors=remount-ro)  
tmpfs on /run/user/1000 type tmpfs (rw,nosuid,nodev,relative,ssize=99280k,mode=700,uid=1000,gid=1000,inode64)  
gvfs-fuse on /run/user/1000/gvfs type fuse_gvfs-fuse (rw,nosuid,nodev,relative,user_id=1000,group_id=1000)  
/172.16.0.10/conun on /mnt/conun type cifs (rw,relative,vers=3.1,i18n,cache=strict,username=uadmin,uid=0,noforceuid,gid=0,noforcegid,addr=172.16.0.10,file_mode=0755,dir_mode=0755,soft,nounix,serverIno,mapp  
root@EQ-01:~# rm -rf /mnt/conun  
root@EQ-01:~#
```

Para evitarnos a búsqueda da carpeta montada a través do explorador de ficheiros de Ubuntu, instalaremos un paquete chamado libpam-mount que nos aforrará ese paso

```
apt install libpam-mount
```

Desktop Cliente U20.04 [Running] - Oracle VM VirtualBox

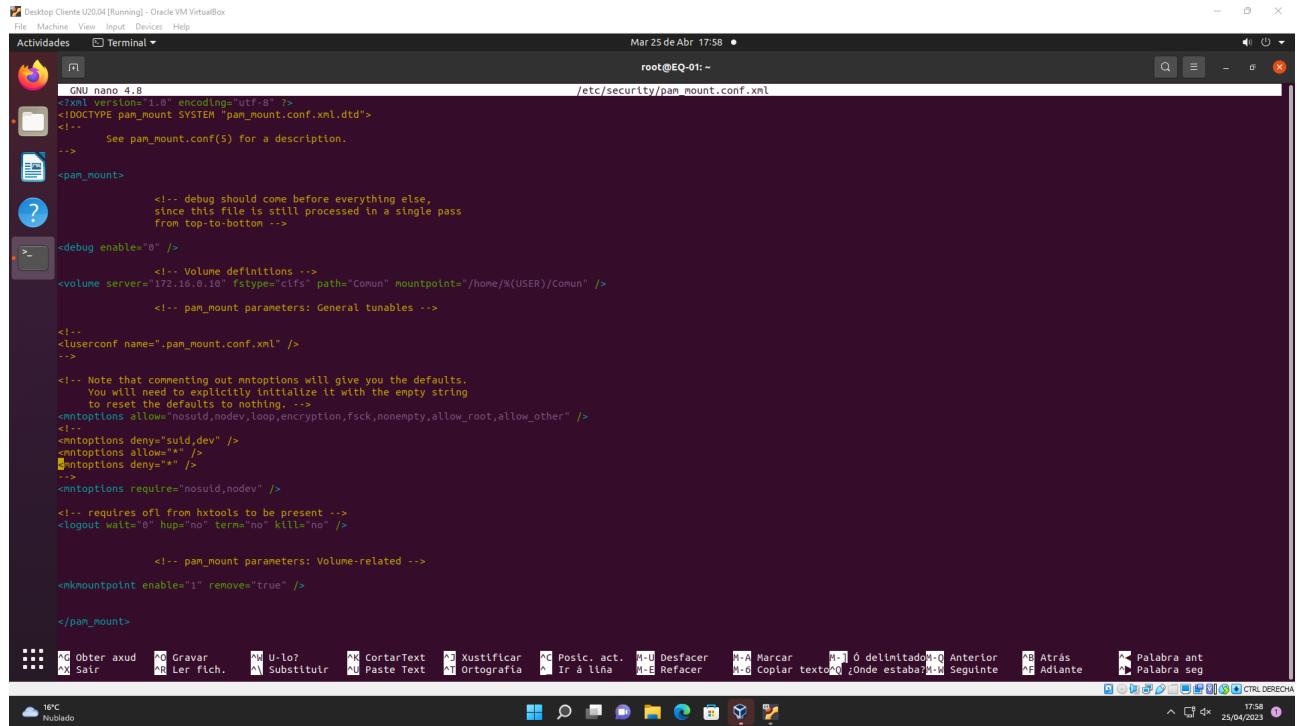
File Machine View Input Devices Help

Actividades Terminal Mar 25 de Abr 16:52 •

```
root@EQ-01: ~
root@EQ-01: ~# /dev/sda1 on /boot/efi type vfat (rw,relatime,fmask=0077,dmask=0077,codepage=437,iocharset=iso8859-1,shortname=lxed,errors=remount-ro)
tmpfs on /run/user/1000 type tmpfs (rw,nosuid,nodev,relatime,size=99280k,mode=700,uid=1000,gid=1000,inode64)
gvfsd-fuse on /run/user/1000 gvfs type fuse.gvfsd-fuse (rw,nosuid,nodev,relatime,user_id=1000,group_id=1000)
osix,rsize=4194304,wsize=4194304,bsize=1048576,echo_interval=60,actimeo=1)
172.16.0.10/Comun on /mnt/comun type cifs (rw,relatime,vers=3.1.1,cache=strict,username=uadmin,uid=0,noforceuid,gid=0,noforcegid,addr=172.16.0.10,file_mode=0755,dir_mode=0755,soft,nounix,serverino,mapp
root@EQ-01: ~# apt install libpam-mount
Lendo as listas de paquetes... Feito
Construindo a árvore de dependências
Lendo a información do estado... Feito
Os seguintes paquetes foram instalados automáticamente e xa non son necesarios:
glxgears libglxfp1:i386 libglxwuplugin1 liblvm1 libmbi linux-headers-5.4.0-42-generic
linux-headers-5.4.0-42-generic liblvm2-limage-5.4.0-42-generic
linux-modules-extra-5.4.0-42-generic
Use `apt autoremove` para eliminálos.
Instalaránse os paquetes adicionais seguintes:
libhx28 libpam-mount-bin
Paquetes suxeridos:
dash sysfsutils htools
Os seguintes paquetes NOVOS hanse instalar:
libhx28 libpam-mount libpam-mount-bin
0 novados, 3 instalados. Vanse retirar 0 e deixar 0 sen novar.
Ten que recibir 128 kB de arquivos.
Despois desta operación ocuparánse 488 kB de disco adicionais.
Quere continuar? [S/n] s
Rcb1: http://es.archive.ubuntu.com/ubuntu focal/main amd64 libhx28 amd64 3.24-1 [32,9 kB]
Rcb1: http://es.archive.ubuntu.com/ubuntu focal-updates/main amd64 libhx28 amd64 2.16-10ubuntu0.20.04.1 [58,8 kB]
Rcb3: http://es.archive.ubuntu.com/ubuntu focal-updates/main amd64 libpam-mount-bin amd64 2.16-10ubuntu0.20.04.1 [28,0 kB]
Obtiverónse 120 kB en 1s (161 kB/s)
Seleccionando o paquete libhx28:amd64 non seleccionado anteriormente.
(A ler a base de datos ... 235518 ficheiros ou directorios instalados actualmente.)
Preparando o desempaquetado de .../libhx28_3.24-1_amd64.deb...
Desempaquetando libhx28:amd64 (3.24-1)...
Selcionando o paquete libpam-mount-bin non seleccionado anteriormente.
Preparando o desempaquetado de .../libpam-mount_2.16-10ubuntu0.20.04.1_amd64.deb...
Desempaquetando libpam-mount:amd64 (2.16-10ubuntu0.20.04.1)
Seleccionando o paquete libpam-mount-bin non seleccionado anteriormente.
Preparando o desempaquetado de .../libpam-mount-bin_2.16-10ubuntu0.20.04.1_amd64.deb...
Desempaquetando libpam-mount-bin (2.16-10ubuntu0.20.04.1)...
A configurar libhx28:amd64 (3.24-1)...
Procesando os disparadores de man-db (3.0.1-1)...
Procesando os disparadores de sgml-base (1.29.1)...
Procesando os disparadores de libc-bin (2.31-0ubuntu9.9)...
A configurar libpam-mount-bin (2.16-10ubuntu0.20.04.1)...
root@EQ-01: ~# apt install libpam-mount
```

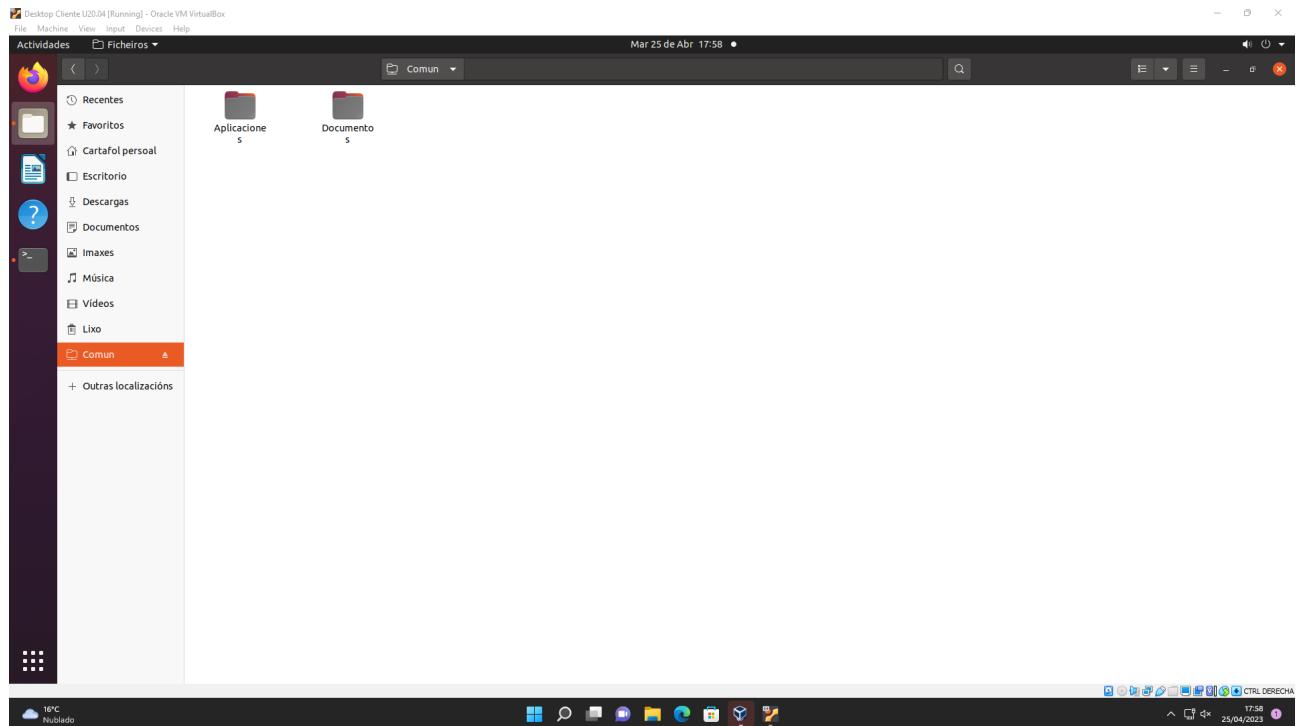
Unha vez instalado este paquete modificaremos un ficheiro para engadir un volumen que representara a carpeta montada que se situará a esquerda unha vez aberto o explorador de ficheiros

`nano /etc/security/pam_mount.conf.xml`



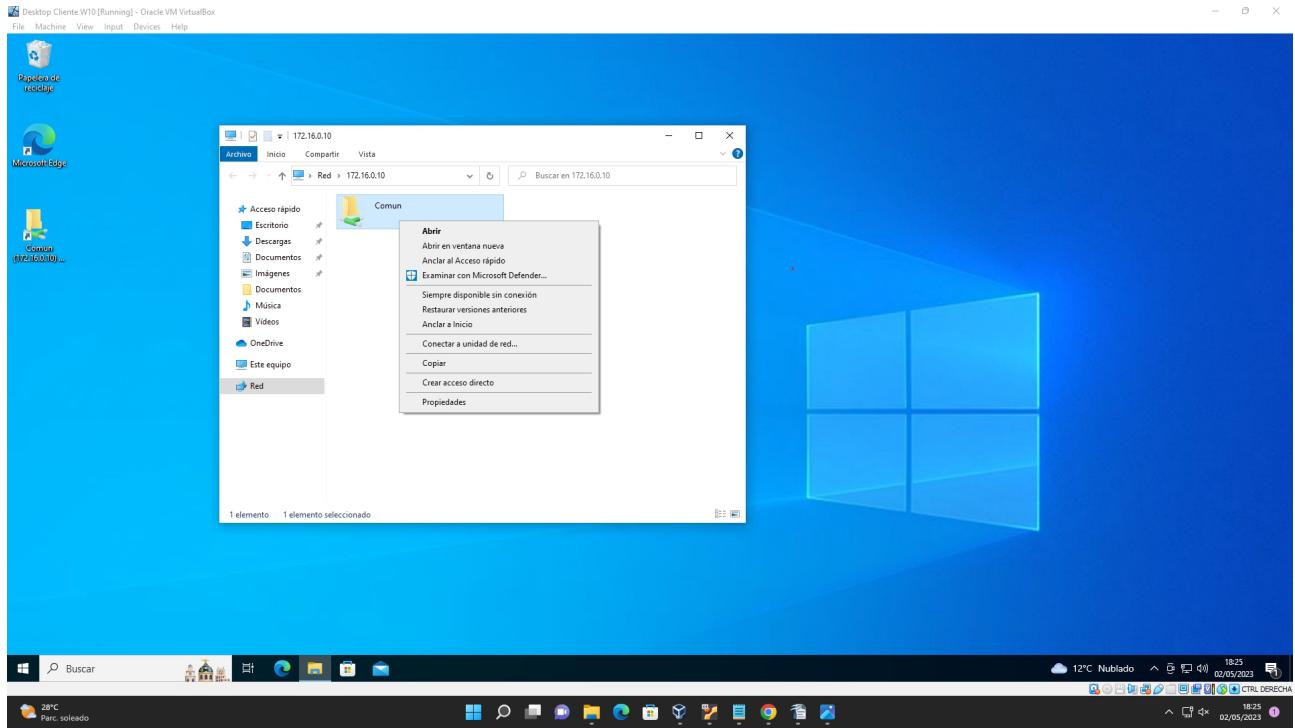
```
GNU nano 4.8
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE pam_mount SYSTEM "pam_mount.conf.xml.dtd">
<!--
      See pam_mount.conf(5) for a description.
-->
<pam_mount>
    <!-- debug should come before everything else,
        since this file is still processed in a single pass
        from top-to-bottom -->
    <debug enable="0" />
    <!-- Volume definitions -->
    <volume server="172.16.0.10" fstype="cifs" path="/Comun" mountpoint="/home/%(USER)/Comun" />
    <!-- pam_mount parameters: General tunables -->
    <!--
        Note that commenting out mntoptions will give you the defaults.
        You will need to explicitly initialize it with the empty string
        to reset the defaults to nothing. -->
    <mntoptions allow="nosuid,nodev,loop,encryption,fsck,nonempty,allow_root,allow_other" />
    <mntoptions deny="suid,dev" />
    <mntoptions allow="" />
    <mntoptions deny="" />
    <!--
        mntoptions require="nosuid,nodev" />
    <!-- requires of from hxtools to be present -->
    <logout wait="0" hup="no" term="no" kill="no" />
    <!-- pam_mount parameters: Volume-related -->
    <mkmountpoint enable="1" remove="true" />
</pam_mount>
```

Se realizamos este paso con éxito, ao cerrar sesión e volver a iniciar, ao abrir o explorador de ficheiros aparecerá a carpeta Común na que se visualizará os archivos creados por o servidor ou por outro equipo

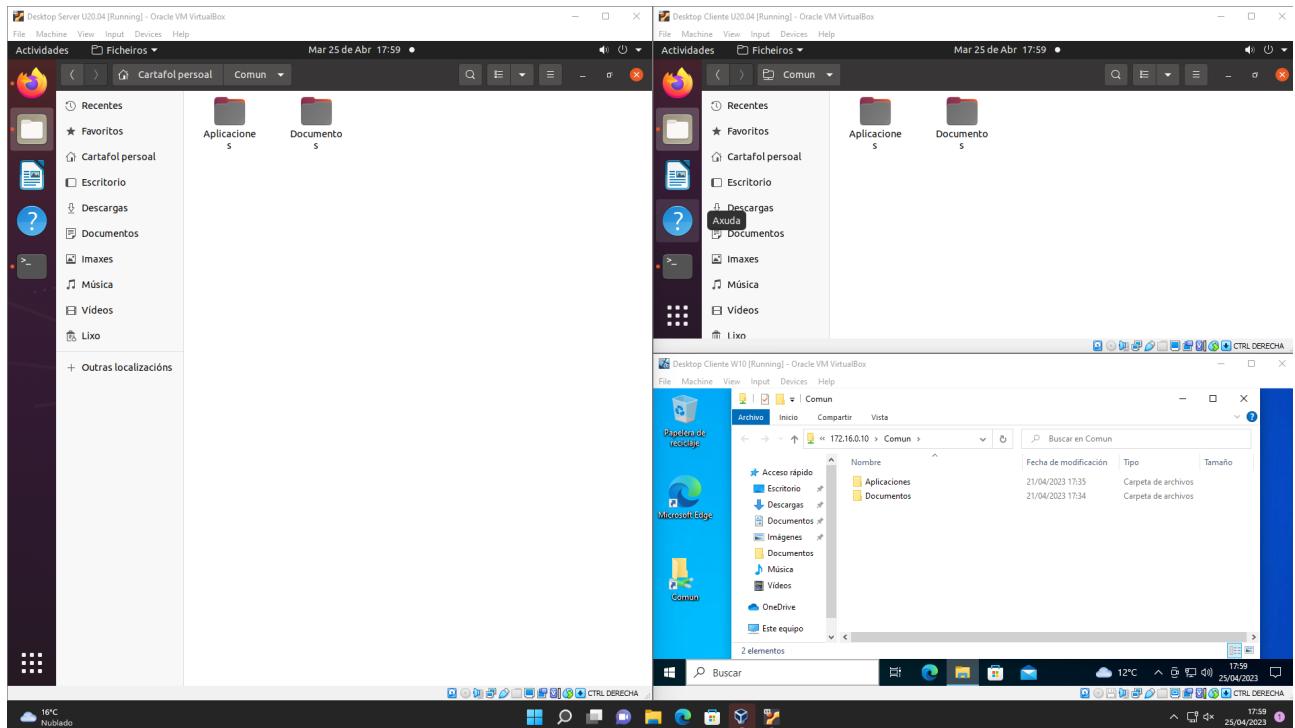


Configuración do cliente Windows 10 Cliente para Común

No caso de Windows non é necesario realizar ningun paso tan complexo como en Ubuntu, bastaría con visualizar a carpeta do servidor e mandar un acceso directo ao escritorio, tendo así acceso directo a carpeta Comun sempre que o usuario o queira.



Feito estos pasos, temos un servidor que ten control total sobre dous equipos cliente e que teñen unha rede para compartir arquivos chamada Comun a cal é procedente do mismo servidor, co cal non terán acceso a ela ata que o servidor estea encendido.



Conclusións

Con estas ultimas opcións rematamos as numerosas combinacións e utilidades de MeshCentral que, nun futuro seguirán expandindose. Ate agora a última actualización de MeshCentral, 1.1.5, data de abril 2023 e engade numerosas opcións xunto con actualizacións e correccións de alguns erros de anteriores versións, nas referencias deste documento atópase o github de Ylian Saint-Hilaire para botarlle un ollo ao seu proxecto.

Concluíndo MeshCentral é un software centrado na xestión remota dos dispositivos incluíndo os seus arquivos mediante unha interface moi intuitiva e sinxela baixo o meu punto de vista o que permite a compatibilidade con outros incontables servizos e programas. Aínda así a competencia de programas desta índole e moi disputada co cal hai moitas outras opcións como pode ser RustDesk, OCS Inventory, Opsi e moitos máis e, dependendo das túas necesidades podes instalar uns programas ou outros que cumpran mellor as funcións desexadas dun xeito máis especializado.

En poucas palabras, se buscas un programa sinxelo de control remoto que teñan moitas opcións de carácter xeral e sexa sinxelo de instalar e monitorizar, este e o teu programa sen ningún tipo de duda.

Referencias

Linkedin de Yliant:

<https://www.linkedin.com/in/ylianst>

Github de Yliant:

<https://github.com/Ylianst>

Configurar ip en Ubuntu 20.04:

<https://www.ochobitshacenunbyte.com/2021/04/26/netplan-configurar-la-red-en-ubuntu-20-04/>

Instalar nodejs e actualizalo:

<https://www.digitalocean.com/community/tutorials/how-to-install-node-js-on-ubuntu-20-04-es>

Menú de MeshCentral:

<https://wikisuite.org/MeshCentral>

Tutorial Instalacion MeshCentral:

<https://www.youtube.com/watch?v=GsQbWZmRRAU>

Creación carpetas compartidas con samba:

<https://jugandoaseringeniero.wordpress.com/2021/10/25/configuracion-de-una-carpeta-publica-con-el-servidor-samba-en-ubuntu-20-04/>