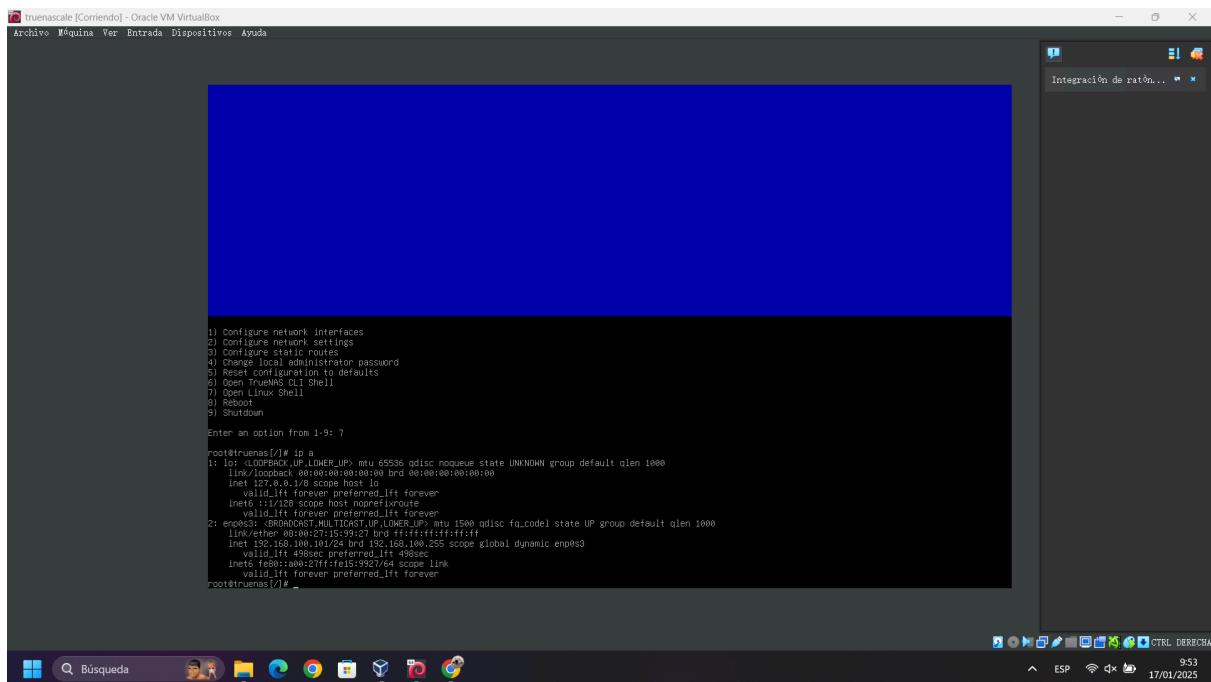
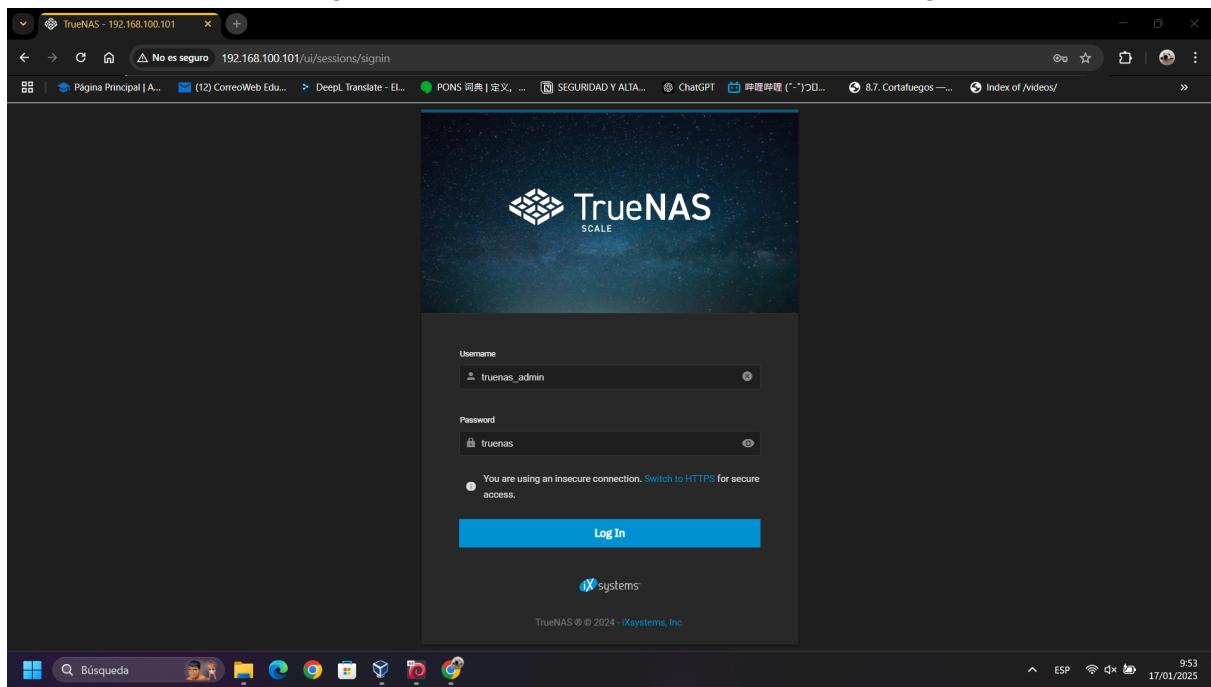
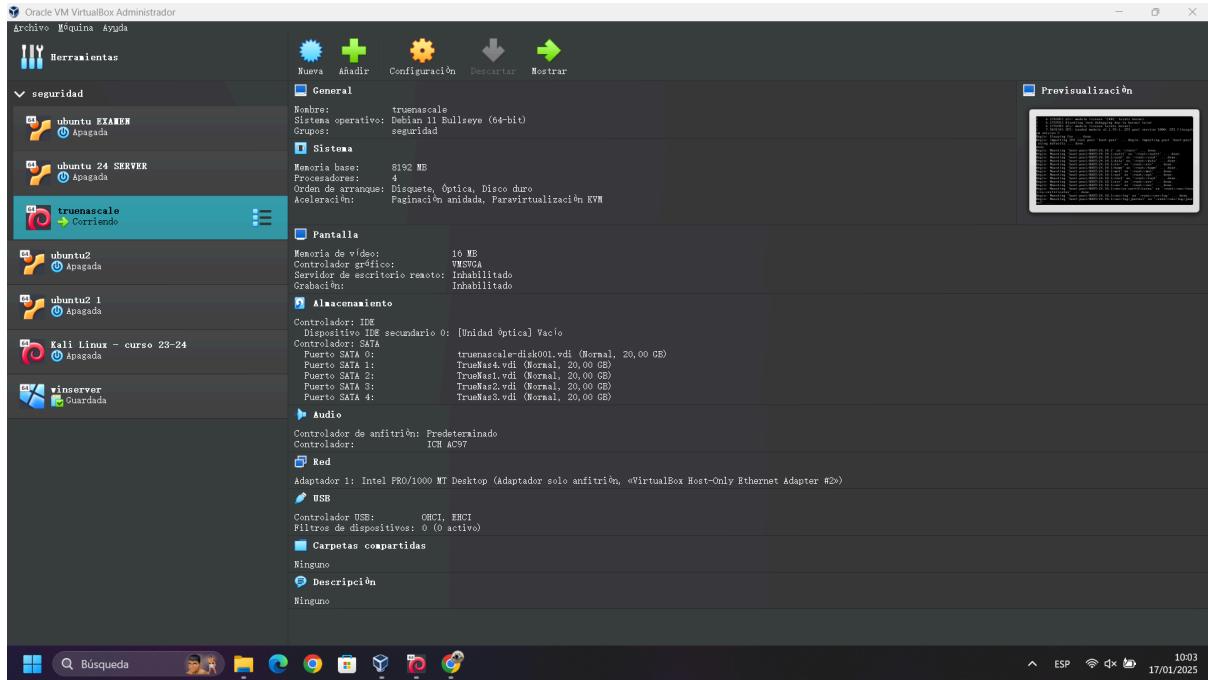


Configuramos el network, el cual tenemos que añadirlo el ip al servidor.
cual nuestro ip es 192.168.100.101



ponemos el ip en el navegador con el usuario default entramos al configuracion





para poder hacer copia de disco tenemos que preparar unos cuantos discos duros para luego

Crea pools de mirror, y raid-z .

para crear pool en storage > create pool

The screenshot shows the TrueNAS Storage Dashboard. On the left, there is a sidebar with various navigation options: Dashboard, Storage (which is selected and highlighted in blue), Datasets, Shares, Data Protection, Network, Credentials, Virtualization, Apps, Reporting, and System. The main content area is titled "Storage Dashboard". It displays a message "No Pools" and a sub-message: "It seems you haven't configured pools yet. Please click the button below to create a pool." Below this message is a prominent blue button labeled "Create pool". At the top of the page, there is a browser header with tabs for "FPS ASIRAS-SAD: Truenas", "Área personal | AulaVirtual", "TrueNAS - 192.168.100.101", and "truenas - Documentos de Google". The address bar shows the URL "192.168.100.101/ui/storage". The bottom of the screen features a dark footer bar with icons for search, file, and system status, along with the date "20/01/2025" and time "8:58".

en lugar de data seleccionamos que se trata de que layout = mirror cual hay que seleccionar al minimo dos discos.

The screenshot shows the 'Manual Selection' screen for creating a VDEV. The 'VDEVs' section displays a 'MIRROR' configuration with two selected disks: 'sdb' and 'sdc', both labeled '20 GiB'. The interface includes search and filter options for disk type ('HDD') and size ('20 GiB'). A summary table provides details for each disk, and a large 'Add' button is visible at the top right. At the bottom, there are 'Cancel' and 'Save Selection' buttons.

The screenshot shows the 'Unused Disks' screen for the 'yehan_mirror' pool. It displays a summary of the pool's topology: '1 x MIRROR | 2 wide | 20 GiB'. The 'Topology' section lists various VDEV types and their status. The 'Usage' section shows a 0% utilization chart and details about usable capacity (18.89 GiB), used space (2.92 MiB), and available space (18.89 GiB). Buttons for 'Export/Disconnect', 'Manage Devices', 'Manage Datasets', and 'View Disk Space Reports' are present. The left sidebar shows the navigation menu for the 'Storage' section.

cómo anterior hacemos que en lugar de data seleccionamos que es raid1, cual te pide al mínimo que tienes 3 discos

The screenshot shows the 'Manual Selection' step of the storage creation wizard. On the left, there's a sidebar with navigation links like Dashboard, Storage, Datasets, Shares, Data Protection, Network, Credentials, Virtualization, Apps, Reporting, and System. The main area is titled 'VDEVs' and shows a 'RAIDZ1' configuration with an estimated capacity of 40 GiB. Three disks are listed: sdc (20 GiB), sdd (20 GiB), and sdf (20 GiB). A note says 'Drag & drop disks to add or remove them'. At the bottom right are 'Cancel' and 'Save Selection' buttons. Below the main window, there's a navigation bar with 'Back', 'Next', 'Reset Step', and 'Save And Go To Review' buttons.

The screenshot shows the configuration page for the 'yehan_raidz' pool. The left sidebar is identical to the previous screenshot. The main area is divided into several sections: 'Topology' (Data VDEVs: 1 x RAIDZ1 | 3 wide | 20 GiB; Metadata VDEVs: VDEVs not assigned; Log VDEVs: VDEVs not assigned; Cache VDEVs: VDEVs not assigned; Spare VDEVs: VDEVs not assigned; Dedup VDEVs: VDEVs not assigned), 'Usage' (Usable Capacity: 38.4 GiB, Used: 559.45 KiB, Available: 38.4 GiB), 'ZFS Health' (Pool Status: Online, Total ZFS Errors: 0, Scheduled Scrub Task: Set, Auto TRIM: Off), and 'Disk Health' (Disks temperature related alerts: 0, Highest Temperature: No Data, Lowest Temperature: No Data, Average Disk Temperature: No Data, Failed S.M.A.R.T. Tests: 0). There are also 'Manage Devices', 'Manage Datasets', 'Scrub', 'Edit Auto TRIM', and 'View Reports' buttons. The bottom navigation bar includes 'View Disk Space Reports' and 'View All S.M.A.R.T. Tests'.

Dentro pon compartidos tipo samba y prueba que funcionan desde windows.

The screenshot shows the TrueNAS web interface. On the left, the navigation menu includes Dashboard, Storage, Datasets, Shares (selected), Data Protection, Network, Credentials, Virtualization, Apps, Reporting, and System. The main content area displays two tables: 'Windows (SMB) Shares' (RUNNING) and 'UNIX (NFS) Shares'. The 'Windows (SMB) Shares' table has one entry: 'Window' with path '/mnt/ye' and 'Enabled' checked. The 'UNIX (NFS) Shares' table is empty. A modal dialog titled 'Add SMB' is open on the right, showing the 'Basic' tab. It has fields for 'Path' (set to '/mnt'), 'Name' (empty), 'Purpose' (set to 'Default share parameters'), and 'Description' (empty). A checkbox for 'Enabled' is checked. The status bar at the bottom shows '9:41' and '20/01/2025'.

This screenshot is similar to the previous one but shows the 'UNIX (NFS) Shares' table populated with three entries: '/mnt', 'yehan_mirror', and 'yehan_raidz'. The rest of the interface and the modal dialog are identical to the first screenshot.

The screenshot shows the 'Users' page in the TrueNAS SCALE web interface. The left sidebar includes links for Dashboard, Storage, Datasets, Shares, Data Protection, Network, Credentials, Virtualization, Apps, Reporting, and System. The main content area displays a table of users:

Username	UID	Builtin	Full Name	Roles
root	0	Yes	root	Full Admin, Has Allow List
truenas_admin	950	No	Local Administrator	Full Admin, Has Allow List
yehan	3000	No	yehan	N/A

At the bottom right of the table, there are buttons for 'Items per page' (set to 50), '1 – 3 of 3', and navigation arrows. The bottom of the screen shows a Windows taskbar with various icons and a system tray indicating the date and time as 20/01/2025.

The screenshot shows the 'Shares' page in the TrueNAS SCALE web interface. The left sidebar includes links for Dashboard, Storage, Datasets, Shares, Data Protection, Network, Credentials, Virtualization, Apps, Reporting, and System. The main content area displays two sections: 'Windows (SMB) Shares' and 'Block (iSCSI) Shares Target'.

Windows (SMB) Shares:

Name	Path	Description
Window	/mnt/yehan_m...	

Block (iSCSI) Shares Target:

Target Name	Target Alias

A file browser window is open in the background, showing a directory structure with folders like 'Windows_shares', 'fotos', 'templates', 'OVA', and 'Este equipo' (with sub-folders 'Disco local (C:)', 'document (D:)', and 'Red'). The bottom of the screen shows a Windows taskbar with various icons and a system tray indicating the date and time as 20/01/2025.

NFS

Instalar los servicio de cliente de nfs en linux cual sel servidor el truenas

P2222

Terminal Sessions View X server Tools Games Settings Macros Help

Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help

Quick connect...

Name /home/clase/

clase@yehan:~\$ sudo apt-get install nfs-common
[sudo] password for clase:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
 keyutils libevent-core-2.1-7 libnfsidmap1 rpcbind
Suggested packages:
 open-iscsi watchdog
The following NEW packages will be installed:
 keyutils libevent-core-2.1-7 libnfsidmap1 nfs-common rpcbind
0 upgraded, 5 newly installed, 0 to remove and 585 not upgraded.
Need to get 1,709 kB of additional archive(s).
After this operation, 1,709 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://es.archive.ubuntu.com/ubuntu jammy/main amd64 libevent-core-2.1-7 amd64 2.1.12-stable-1build3 [93,9 kB]
Get:2 http://es.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libnfsidmap1 amd64 1:2.6.1-1ubuntu1.2 [42,9 kB]
Get:3 http://es.archive.ubuntu.com/ubuntu jammy/main amd64 rpcbind amd64 1.2.6-2build1 [46,6 kB]
Get:4 http://es.archive.ubuntu.com/ubuntu jammy/main amd64 keyutils amd64 1.6.1-2ubuntu3 [50,4 kB]
Get:5 http://es.archive.ubuntu.com/ubuntu jammy-updates/main amd64 nfs-common amd64 1:2.6.1-1ubuntu1.2 [241 kB]
Fetched 1,782 kB in 1s (1,829 kB/s)
Selecting previously unselected package libevent-core-2.1-7:amd64.
(Reading database... 179817 files and directories currently installed.)
Preparing to unpack .../libevent-core-2.1-7_2.1.12-stable-1build3_amd64.deb ...
Unpacking libevent-core-2.1-7:amd64 (2.1.12-stable-1build3) ...

Remote monitoring
 Follow terminal folder

3 P2222

For more info, ctrl+click on help or visit our website.

Welcome to Ubuntu 22.04.1 LTS (GNU/Linux 5.15.0-47-generic x86_64)

* Documentation: <https://help.ubuntu.com>
* Management: <https://landscape.canonical.com>
* Support: <https://ubuntu.com/advantage>

524 updates can be applied immediately.
349 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable

Last Login: Fri Jan 17 08:48:46 2025 from 10.0.3.2
clase@yehan:~\$ sudo apt-get install nfs-common
[sudo] password for clase:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
 keyutils libevent-core-2.1-7 libnfsidmap1 rpcbind
Suggested packages:
 open-iscsi watchdog
The following NEW packages will be installed:
 keyutils libevent-core-2.1-7 libnfsidmap1 nfs-common rpcbind
0 upgraded, 5 newly installed, 0 to remove and 585 not upgraded.
Need to get 1,709 kB of additional archive(s).
After this operation, 1,709 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://es.archive.ubuntu.com/ubuntu jammy/main amd64 libevent-core-2.1-7 amd64 2.1.12-stable-1build3 [93,9 kB]
Get:2 http://es.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libnfsidmap1 amd64 1:2.6.1-1ubuntu1.2 [42,9 kB]
Get:3 http://es.archive.ubuntu.com/ubuntu jammy/main amd64 rpcbind amd64 1.2.6-2build1 [46,6 kB]
Get:4 http://es.archive.ubuntu.com/ubuntu jammy/main amd64 keyutils amd64 1.6.1-2ubuntu3 [50,4 kB]
Get:5 http://es.archive.ubuntu.com/ubuntu jammy-updates/main amd64 nfs-common amd64 1:2.6.1-1ubuntu1.2 [241 kB]
Fetched 1,782 kB in 1s (1,829 kB/s)
Selecting previously unselected package libevent-core-2.1-7:amd64.
(Reading database... 179817 files and directories currently installed.)
Preparing to unpack .../libevent-core-2.1-7_2.1.12-stable-1build3_amd64.deb ...
Unpacking libevent-core-2.1-7:amd64 (2.1.12-stable-1build3) ...

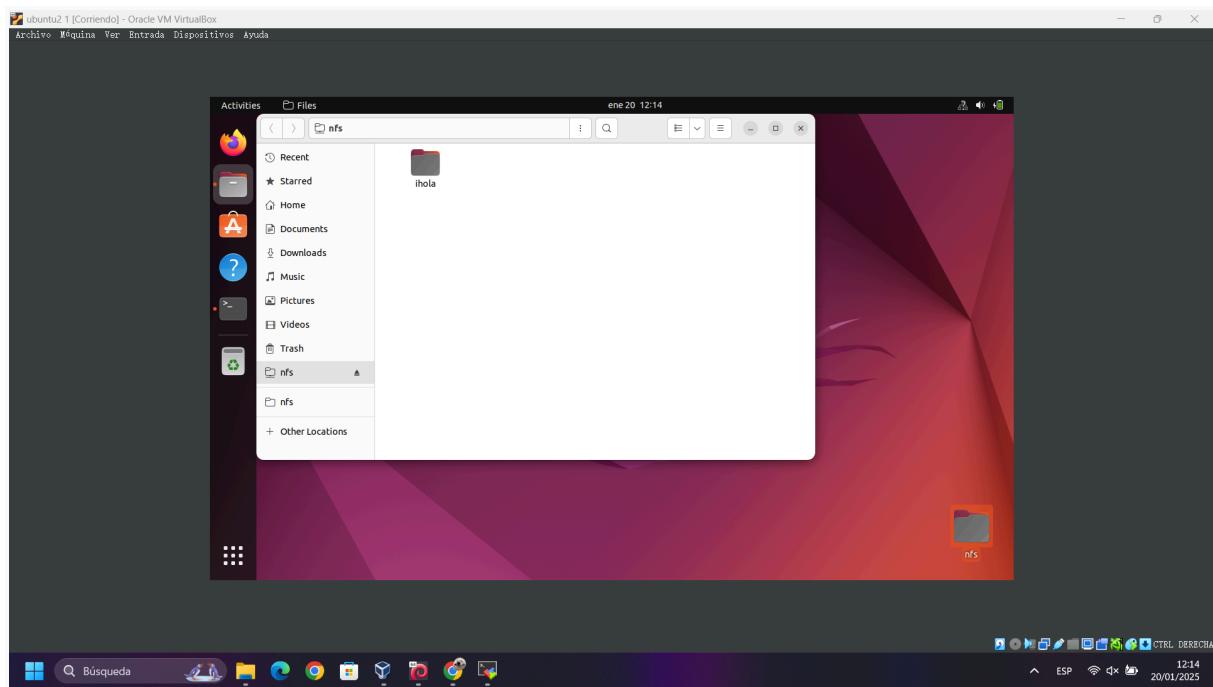
yehan 96% 0.70 GB / 7.69 GB 0.05 Mb/s 236 sec close (x2) 1/ 26% /boot/efi: 2%

UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>

ESP 9:56
20/01/2025

```
sudo mount -t nfs 192.168.100.101:/mnt/yehan_mirror Desktop/nfs
```

The screenshot shows a MobaXterm interface with several windows open. The main window displays a terminal session on port 14. The terminal output shows a user navigating through a directory structure, including .config, .local, Public, Videos, and .Xauthority. It also shows the result of running 'df -h' and 'mount' commands. The file browser window on the left shows a local directory structure with icons for desktop, documents, music, pictures, practice-csr, snap, templates, and videos. A status bar at the bottom provides system information like CPU usage (1%), memory (0.98 GB / 7.69 GB), network (0.01 MB/s), and battery (29 min). A toolbar at the top includes icons for terminal, sessions, view, X server, tools, games, settings, macros, help, and system status.



Simular el fallo de un disco

vamos a hacer con el disco mirror asiq borramos entre sdd o sde

	Name	Serial	Disk Size	Pool
	sda	VBfc424149-6ce6512b	20 GiB	boot-pool
	sdb	VBca19a0cb-839e9fc2	20 GiB	yehan_raidz
	sdc	VB20a742cb-704bd3f	20 GiB	yehan_mirror
	sdd	VBa7de7fcf-f3d4a426	20 GiB	yehan_mirror
	sde	VB27871728-550f8088	20 GiB	yehan_raidz
	sdf	VBfb155789-03170cf0	20 GiB	yehan_raidz
	sdg	VB2ca7be87-dc6201bc	20 GiB	N/A

borraremos un disco en este caso el disco de truenas 4.

Nombre: truenascale
Sistema operativo: Debian 11 Bullseye (64-bit)
Grupos: seguridad

Almacenamiento

- truenascale - Configuración
- General
- Sistema
- Pantalla
- Almacenamiento
- Audio
- Red
- Fuentes serie
- USB
- Carpetas compartidas
- Interfaz de usuario

Almacenamiento

- Controlador: IDE
- Vacio
- Controller: SATA
- truenascale-disk001.vdi
- TrueNas4.vdi
- TrueNas2.vdi
- TrueNas3.vdi
- TrueNas5.vdi
- TrueNas6.vdi

Atributos

- Disco duro: Puerto SATA 3
- Unidad de estado sólido
- Conectable en caliente

Información

- Tipo (formato): Normal (VDI)
- Tamaño virtual: 20,00 GB
- Tamaño actual: 139,00 MB
- Detalles: Almacenamiento reservado dinámicamente
- Ubicación: C:\Users\xue20\VirtualBox VMs\s...
- Conectado a: truenascale
- Cifrado con clave: --

ahora tenemos un solo mirror.

	Nombre	Serial	Tamaño del disco	Pool
	sda	VBfc424149-6ce6512b	20 GiB	boot-pool
	sdb	VBca19a0cb-83e9fc2	20 GiB	yehan_raidz
	sdd	VB20a742cb-704bd39f	20 GiB	yehan_mirror
	sde	VB27871728-550f8088	20 GiB	yehan_raidz
	sdc	VBfb155789-03170cf0	20 GiB	yehan_raidz
	sdf	VB2ca7be87-dc6201bc	20 GiB	N/A

comprobamos el funcionamiento en samba.

Solución
Este equipo
Disco local (C:)
document (D:)
Red
Esta carpeta está vacía.

podemos ver que en almacenamiento pone que tiene un error sobre topología y salud zfs

The screenshot shows the TrueNAS web interface for the pool 'yehan_mirror'. On the left, a sidebar menu includes 'Dashboard', 'Almacenamiento' (selected), 'Datasets', 'Shares', 'Protección de los datos', 'Red', 'Credenciales', 'Virtualization', 'Aplicaciones', 'Informes', and 'Sistema'. The main content area has two tabs: 'Topología' (Topology) and 'Administrador Unidades' (Unit Manager). The 'Topología' tab displays various VDEV types and their statuses. The 'Administrador Unidades' tab shows disk usage with a 0% utilization chart and a summary of ZFS health. A red 'Salud ZFS' (ZFS Health) icon indicates an issue. Below these are sections for 'Salud de las unidades' (Unit Health) and 'Pruebas S.M.A.R.T.' (SMART Tests). The bottom right corner shows the date and time as 20/01/2025 at 12:44.

para arreglarlo ponemos un disco nuevo. y vamos a administrar unidades.

The screenshot shows the 'Devices' page for the 'yehan_mirror' pool. The sidebar is identical to the previous screenshot. The main table lists disk components: 'Data VDEVs' (MIRROR, sdd, 12978328478948229426) and 'Metadata VDEVs' (UNAVAIL). A yellow box highlights the 'DEGRADED' status of the MIRROR device. A blue 'Add VDEV' button is visible in the top right. The bottom right corner shows the date and time as 20/01/2025 at 12:46.

podemos ver que hay lamidad no tiene disco asignado y está un estado de unavail asi ponemos un disco a ello

Device Name Estado Capacity ZFS Errors

Device Name	Estado	Capacity	ZFS Errors
Data VDEVs			
MIRROR	DEGRADED		Sin errores
sdd	ONLINE	20 GiB	Sin errores
12978328478948229426	UNAVAIL		Sin errores

ZFS Info

Parent: MIRROR-0
Read Errors: 0
Write Errors: 0
Checksum Errors: 0

Disk Info

Disk is unavailable

Replace

en disk info ponemos un replace

Almacenamiento yehan_mirror Devices

Replacing disk
12978328478948229426

Member Disk* sdf (20 GiB)

Forzar

Cancelar **Replace Disk**

ZFS Info

Parent: MIRROR-0
Read Errors: 0
Write Errors: 0
Checksum Errors: 0

Disk Info

Disk is unavailable

y seleccionamos el disco nuevo

ahora ambas disco en online

yehan_mirror Devices

Device Name	Estado	Capacity	ZFS Errors
Data VDEVs			
MIRROR	ONLINE	Sin errores	
sdd	ONLINE	20 GiB	Sin errores
sdf	ONLINE	20 GiB	Sin errores

y el estado de topología y salud zfs vuelvo bueno

Topología ✓

Data VDEVs	VDEVss no asignados
Metadata VDEVs	VDEVss no asignados
Log VDEVs	VDEVss no asignados
Cache VDEVs	VDEVss no asignados
Spare VDEVs	VDEVss no asignados
Dedup VDEVs	VDEVss no asignados

Uso ✓

Espacio util: 18.89 GiB

- Usado: 896 KiB
- Disponible: 18.89 GiB

Ver informes de espacio

Salud ZFS ✓

Estado del pool: En línea

Errores totales de ZFS: 0

Tarea de Scrub programada: Set

Auto TRIM: Off

Último escaneo: Finished Resilver on 2025-01-20 12:47:44

Scrub

Salud de las unidades ✓

Alertas relacionadas con la temperatura de las unidades: 0

Temperatura más alta: No Data

Temperatura más baja: No Data

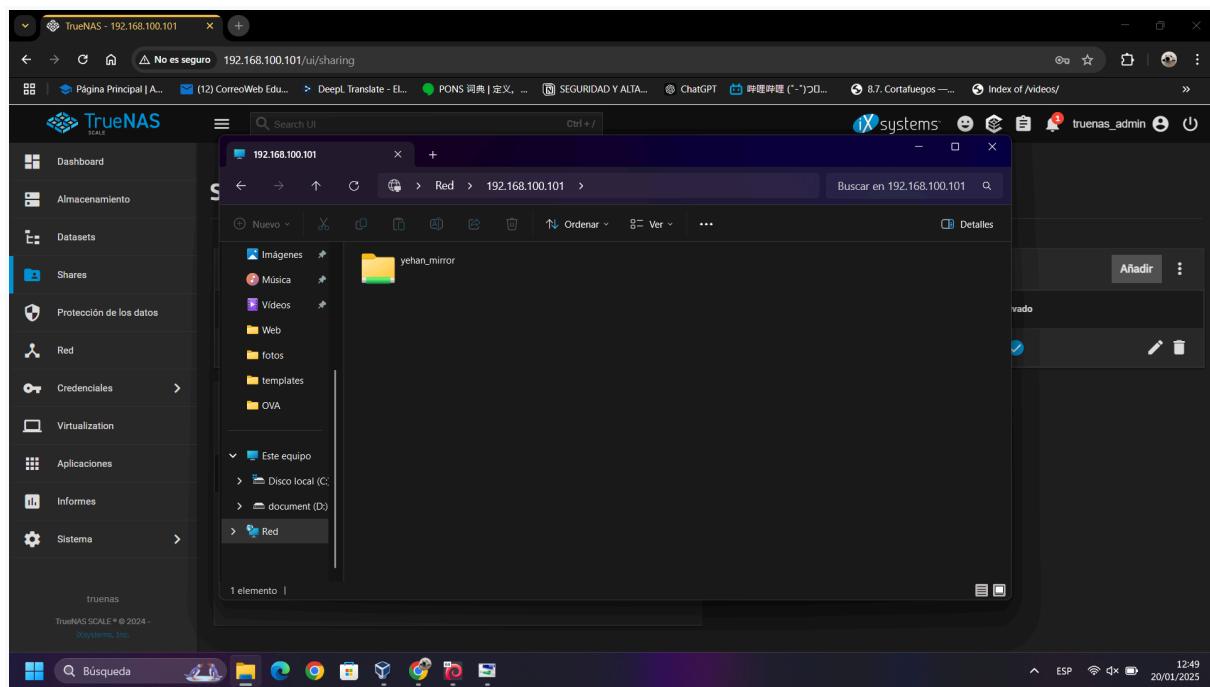
Temperatura media de la unidad: No Data

Pruebas S.M.A.R.T. fallidas: 0

Manage Disks

View Reports

Ver todas las pruebas S.M.A.R.T.



miramos otra vez al samba