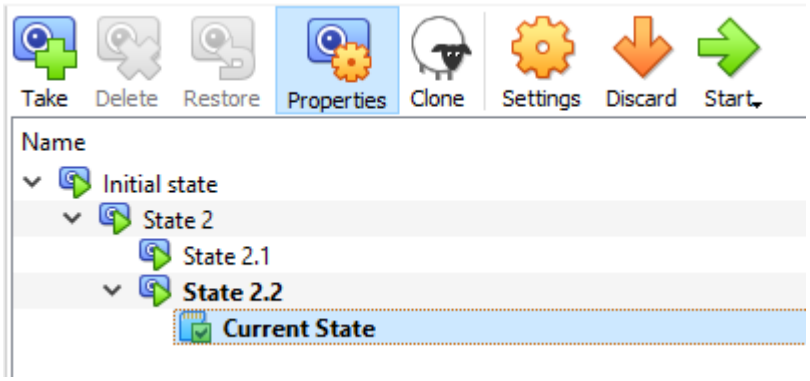
4. Create the snapshots like in the picture below using one of the virtual machines created in the previous exercises. Before each snapshot, you must change something in the operating system. This tool is normally used when performing a critical action or installing software. But, in this case, you can do something so easy as creating a new file to study the different States.

MACHINE→ TOOLS→ SNAPSHOTS

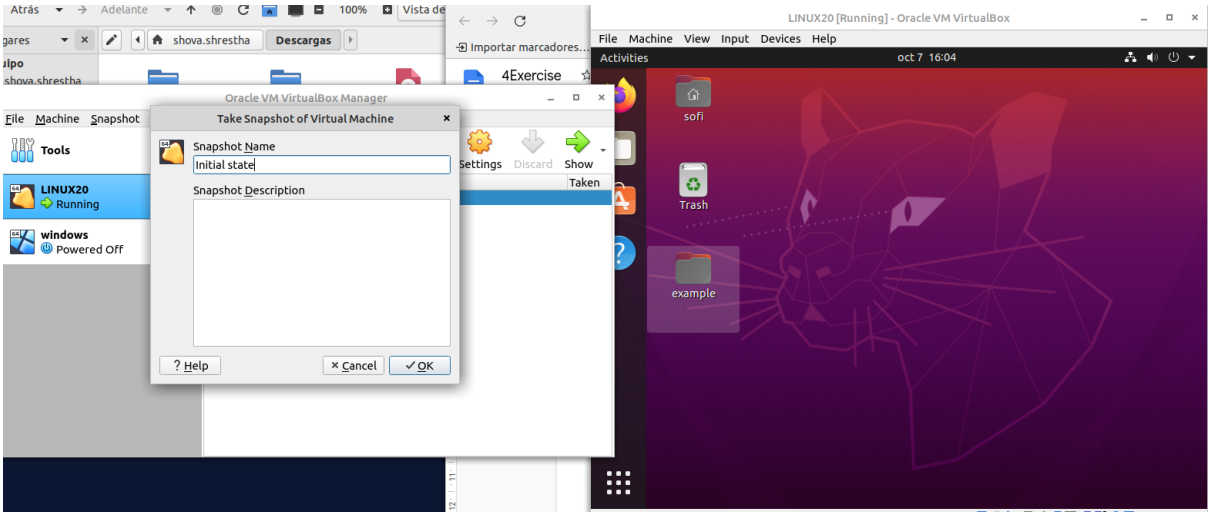


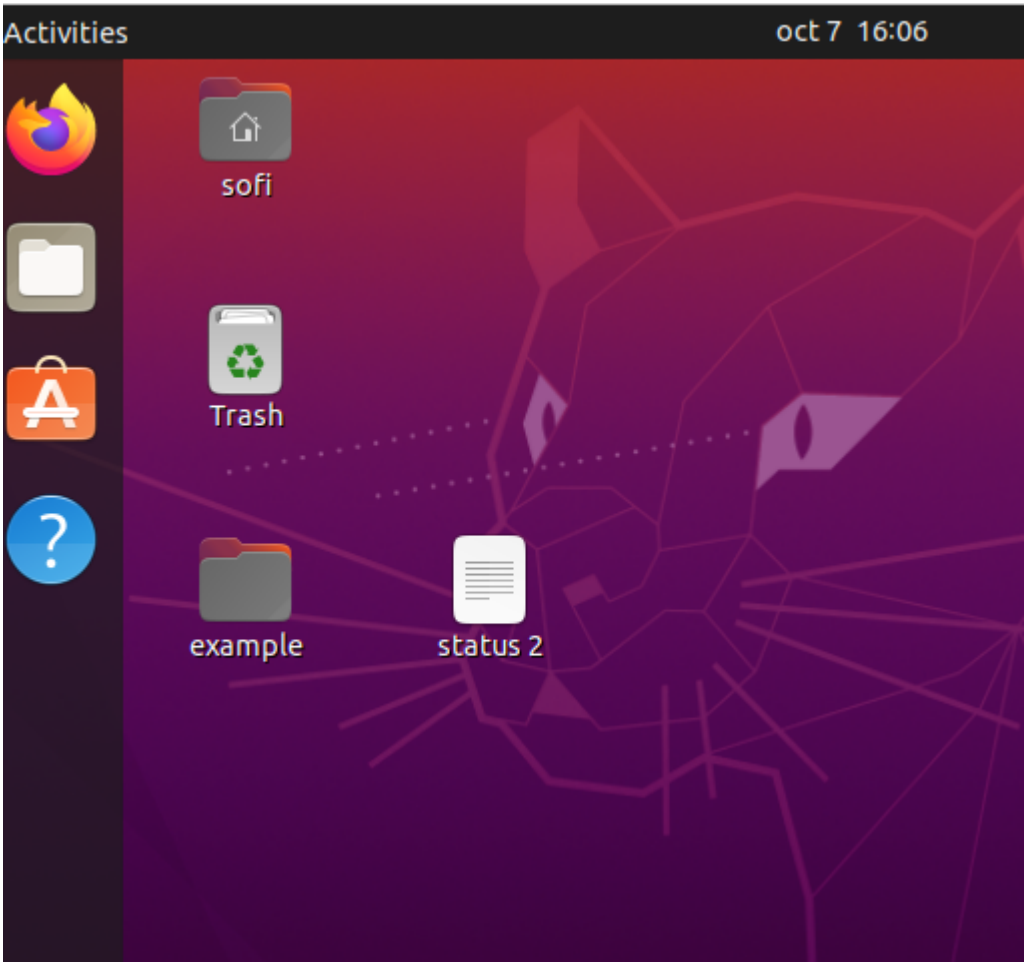
Then, complete the following actions in order:

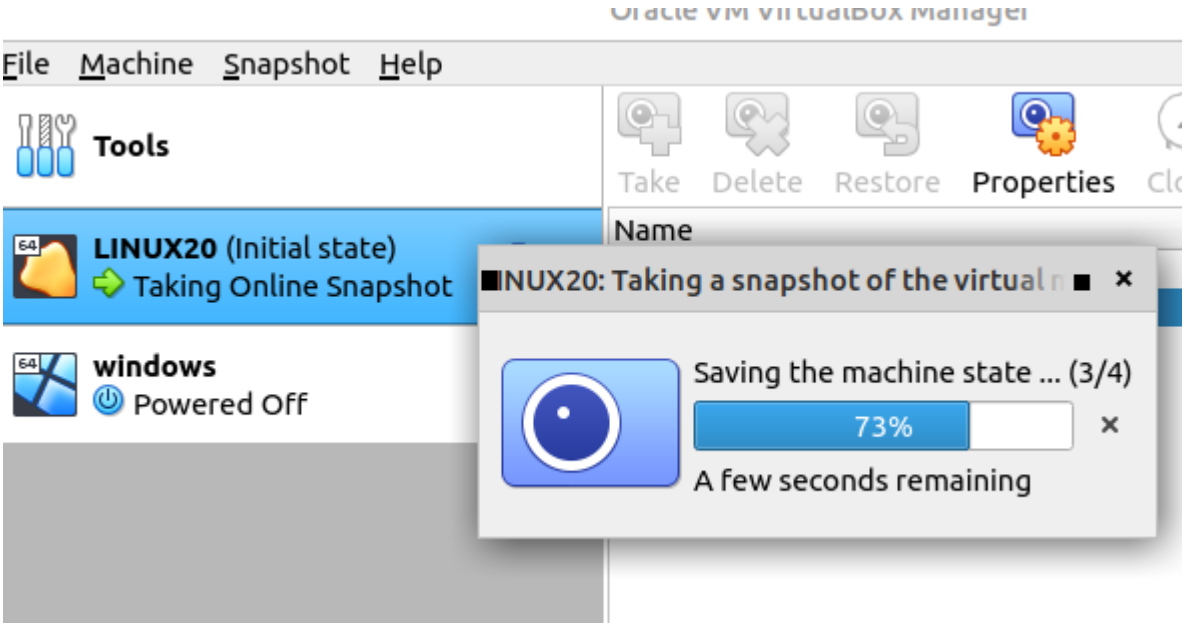
- Restore State 2
- Delete State 2.1 and explain what happens
- Restore State 2.2 no ha pasado nada,, se junta con el estado 2 ?
- Delete State 2.2 and explain what happens

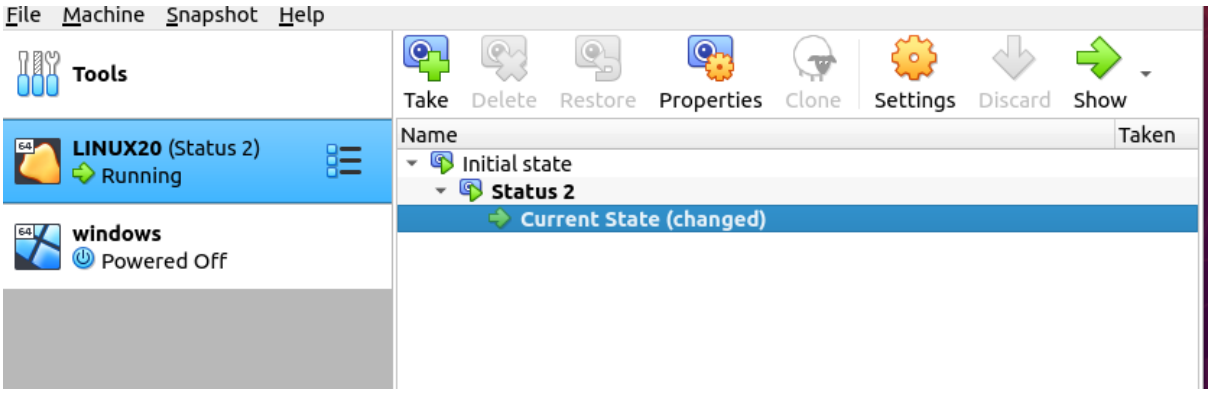
si eliminas el que está arriba se une con el que está abajo guardando las configuraciones del que se borró en cambio si eliminas el que está abajo se eliminará con sus cambios

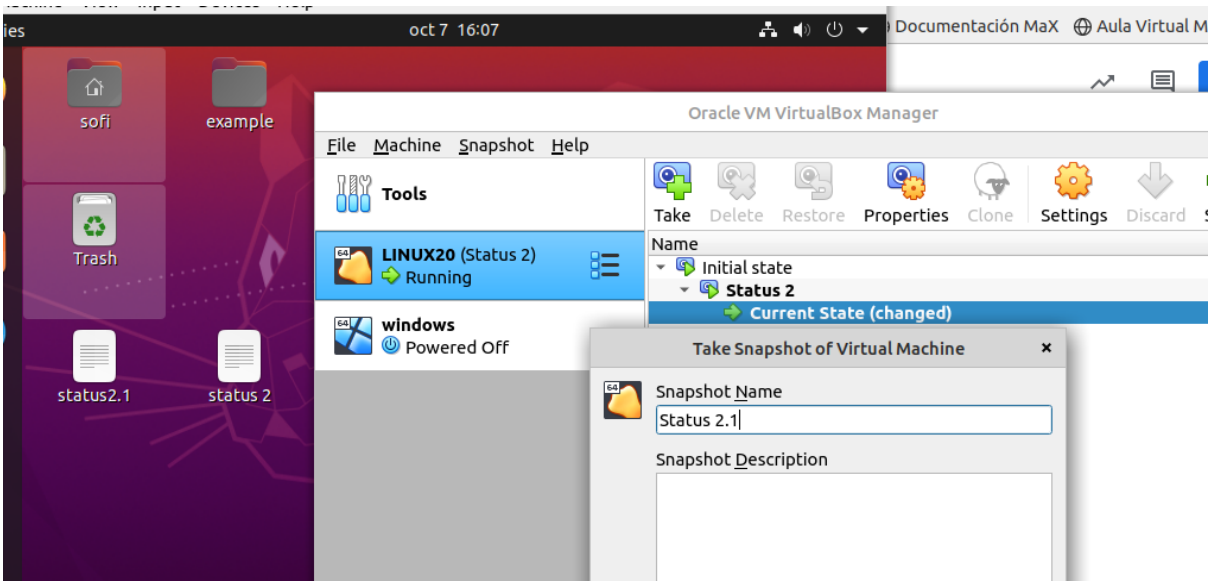
State 2.2 we need to create the state 2 and 2.1 then we shutdown the system and we switch on from the state 2 so we can create the 2.2 in the same level as 2.1

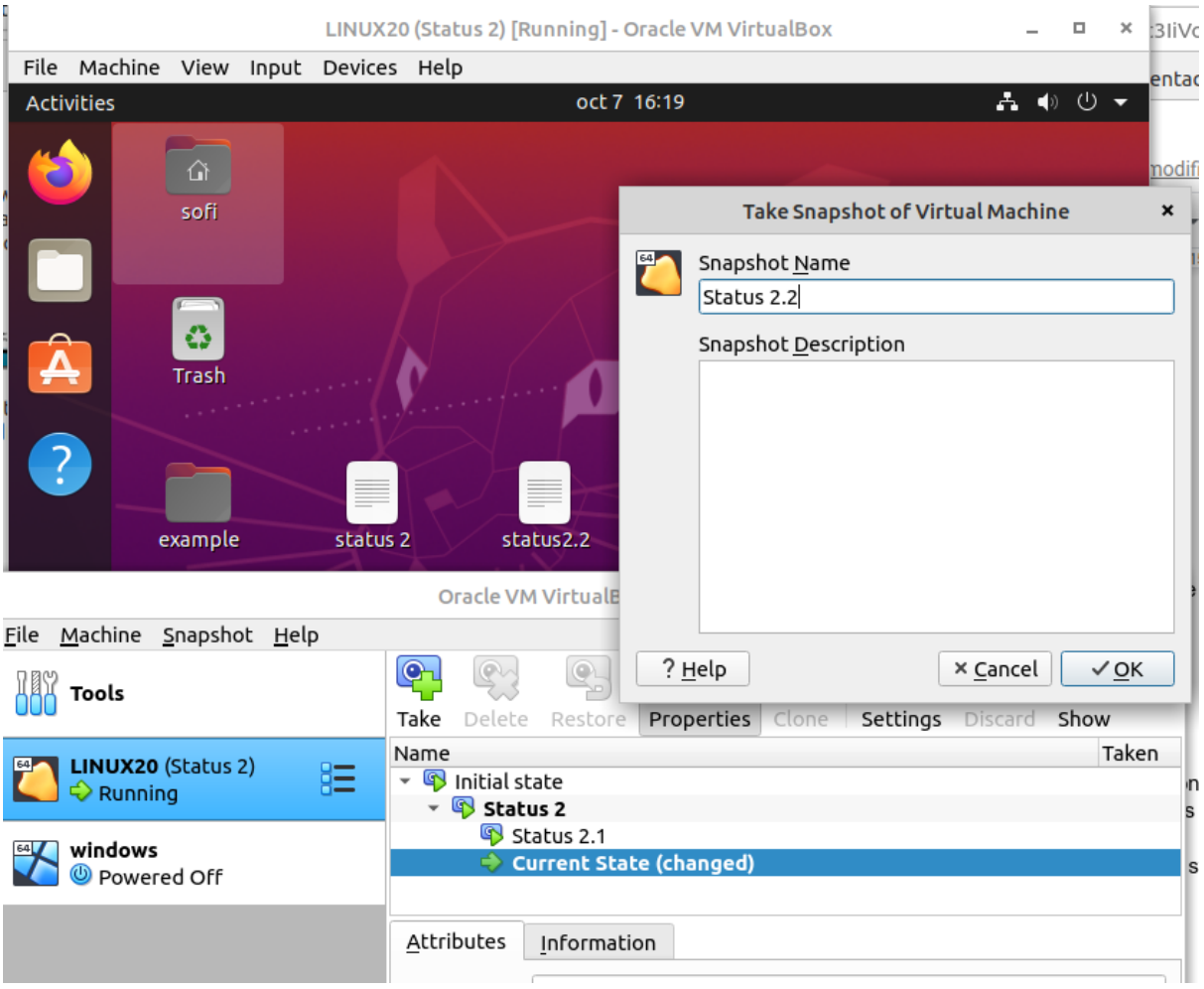


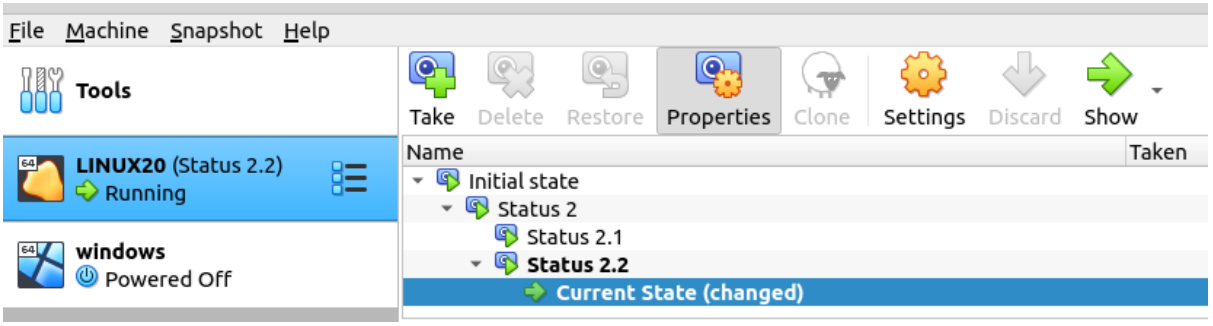

Activities
oct 7 16:06
sofi
Trash
example
status 2


File Machine Snapshot Help
Tools
Take
Delete
Restore
Properties
Name
LINUX20 (Initial state)
Taking Online Snapshot
windows
Powered Off
Saving the machine state ... (3/4)
73%
A few seconds remaining

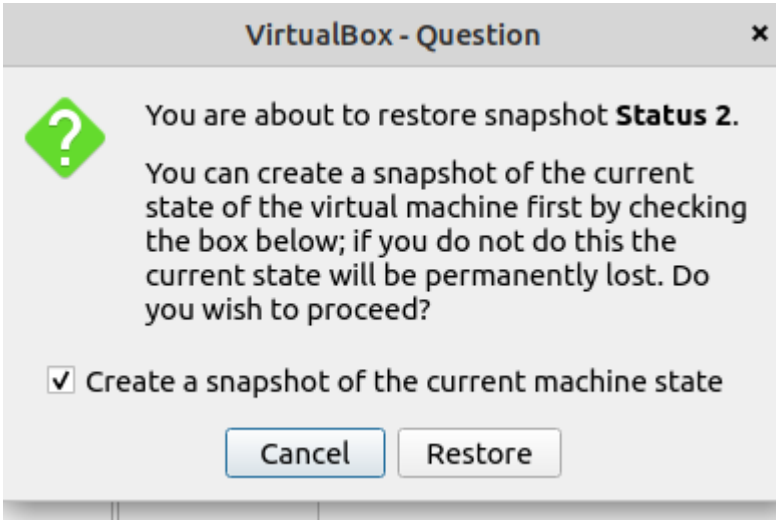

File Machine Snapshot Help
Tools
LINUX20 (Status 2)
Running
windows
Powered Off
Take
Delete
Restore
Properties
Clone
Settings
Discard
Show
Name
Taken
Initial state
Status 2
Current State (changed)

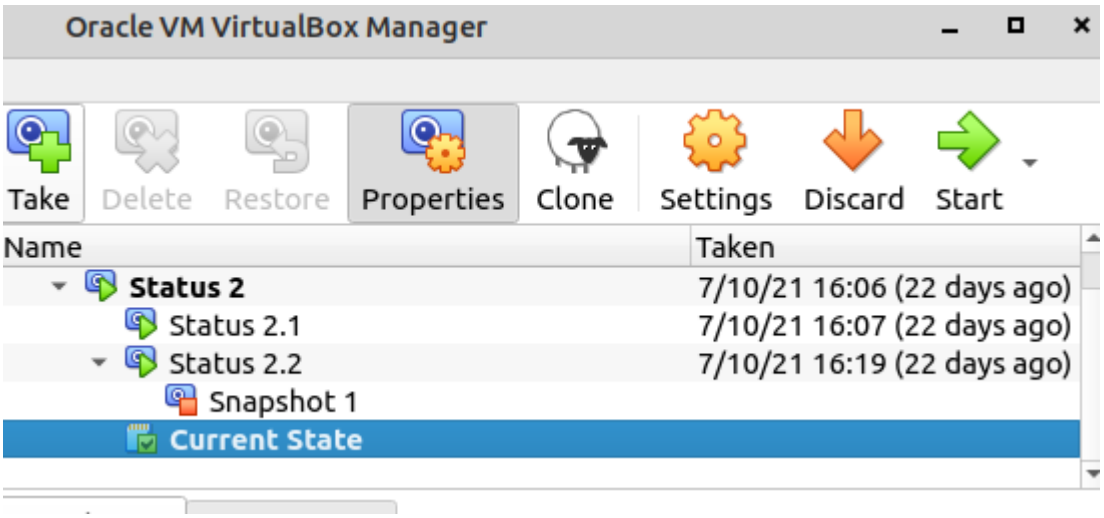

oct 7 16:07
sofi
example
Trash
status2.1
status 2
Oracle VM VirtualBox Manager
File Machine Snapshot Help
Tools
LINUX20 (Status 2)
Running
windows
Powered Off
Take
Delete
Restore
Properties
Clone
Settings
Discard
Name
Initial state
Status 2
Current State (changed)
Take Snapshot of Virtual Machine
Snapshot Name
Status 2.1
Snapshot Description


LINUX20 (Status 2) [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities
oct 7 16:19
sofi
Trash
example
status 2
status2.2
Take Snapshot of Virtual Machine
Snapshot Name
Status 2.2
Snapshot Description
Help
Cancel
OK
File Machine Snapshot Help
Tools
LINUX20 (Status 2)
Running
windows
Powered Off
Take
Delete
Restore
Properties
Clone
Settings
Discard
Show
Name
Taken
Initial state
Status 2
Status 2.1
Current State (changed)
Attributes
Information

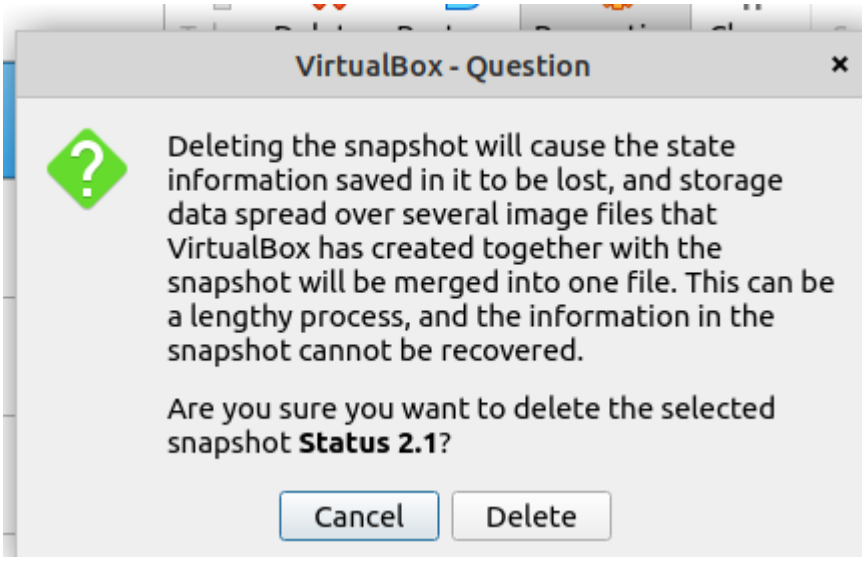


VirtualBox merges the states as much as possible. So, the file created in “State 2.2” has not been deleted.

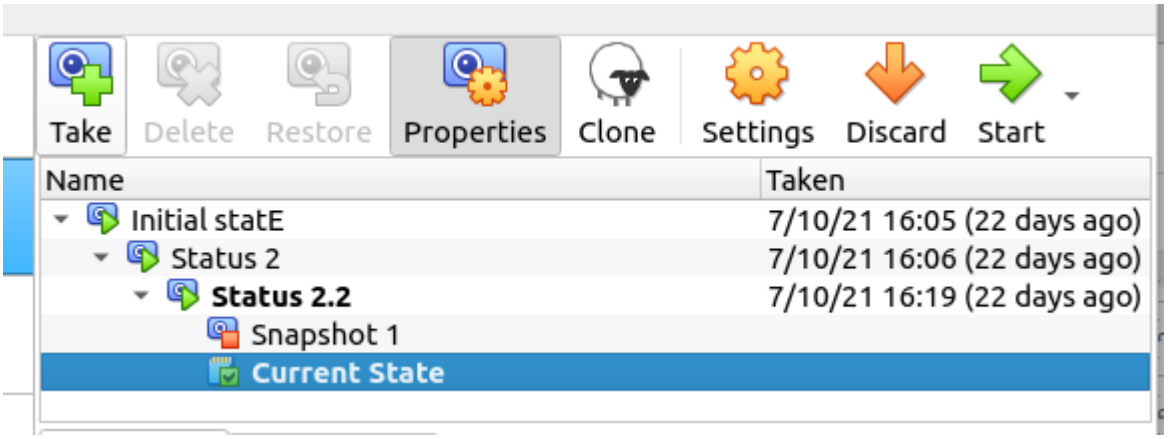


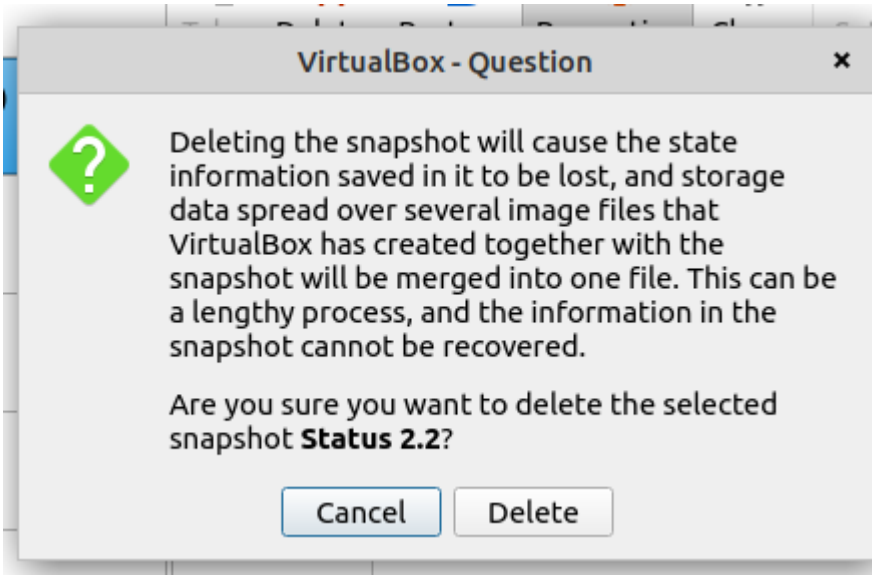


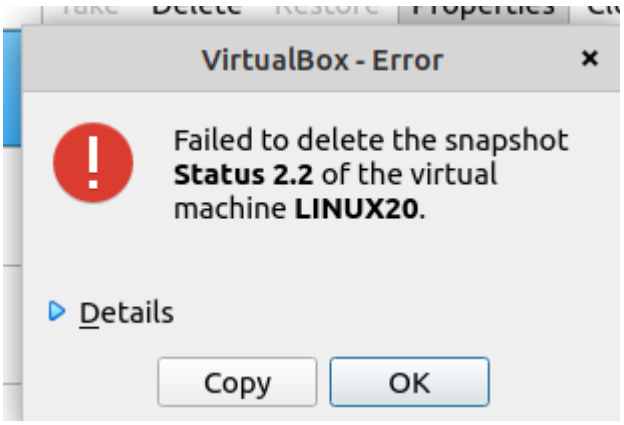
If we start the virtual machine, we will check that the file created in “State 2.1” has disappeared.



VirtualBox merges the states as much as possible. So, the file created in "State 2.2" has not been deleted.







But the snapshots are only merged if they are in the same "branch" and they depend on each other.

For example, in the picture above we can see that the "State 2" is just the previous one, so the changes are merged.

But, in the other case, we are located in "State 2" and "State 2.1" is more recent and it is not in the same "branch", so the modifications of this snapshot are not saved.