

# Betriebssysteme

Windows, macOS, Unix, Virtualisierung und Tools

Tom Gries



Dokumenten URL:

<http://docs.tx7.de/TT-BS3>

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Lizenz:

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Version:

7.2.1 vom 16.01.2025





Ein Betriebssystem (BS) verwaltet die Hardware eines Computers und teilt die Ressourcen zu. Bekannte Betriebssysteme für PCs und mobile Endgeräte sind (in chronologischer Reihenfolge):

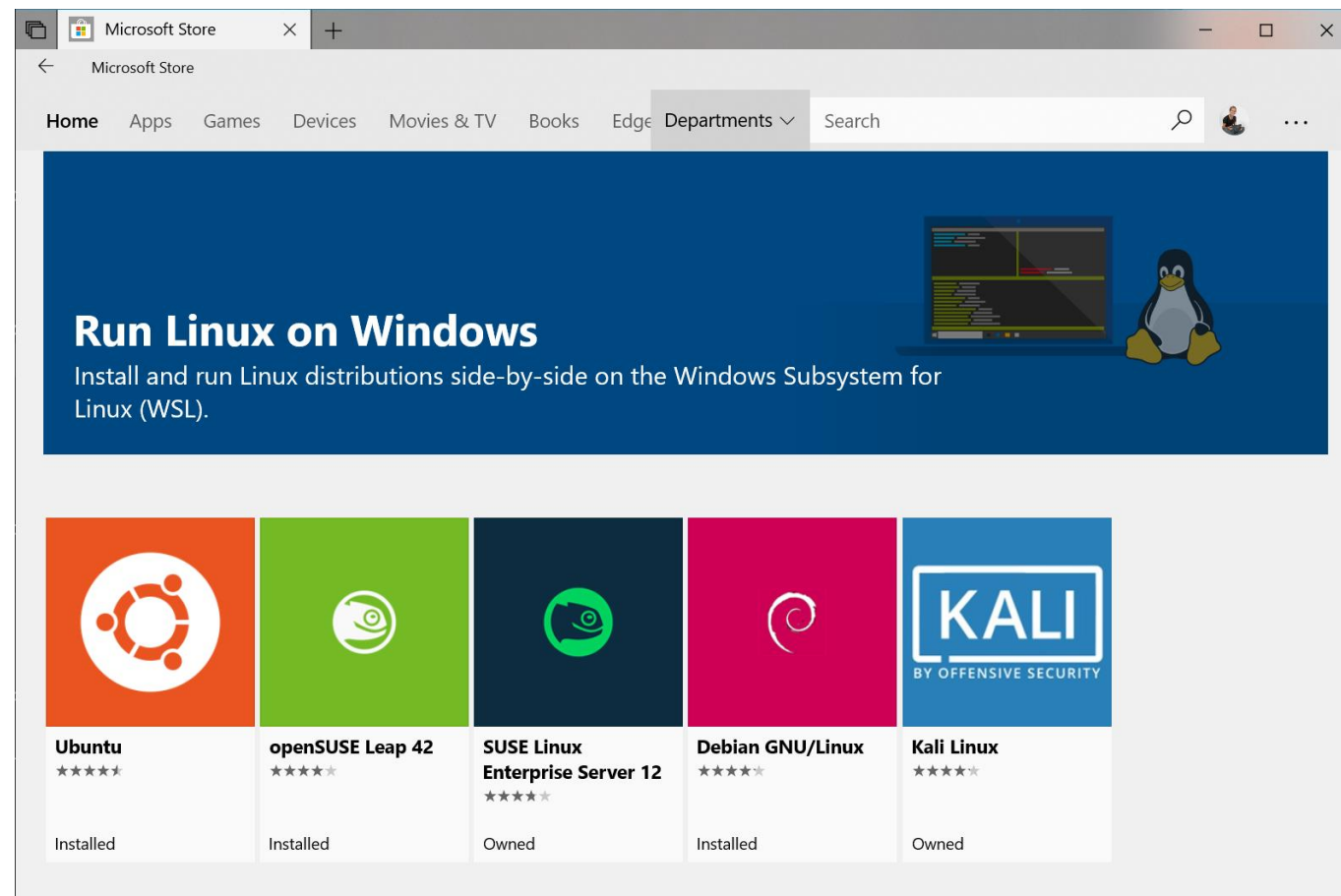
System	Jahr
UNIX	1971
DOS (Nachfolger von CP/M)	1974
Windows	1983
OS/2 Warp	1987
Linux	1991
MacOS	2001
iOS (vorher iPhone OS)	2007
Android	2008

System	2018	2023
Android	38,97 %	41,64 %
Windows	37,07 %	29,25 %
iOS	13,18 %	17,71 %
macOS	5,24 %	6,57 %
Linux	0,76 %	1,54 %
nicht identifizierte BS	2,72 %	1,93 %
andere BS	2,06 %	1,36 %



Das **Windows Subsystem for Linux**, kurz WSL, ist eine Erweiterung von Windows 10, um Linux innerhalb von Windows auszuführen.

WSL nutzt Virtualisierungstechniken der CPU.





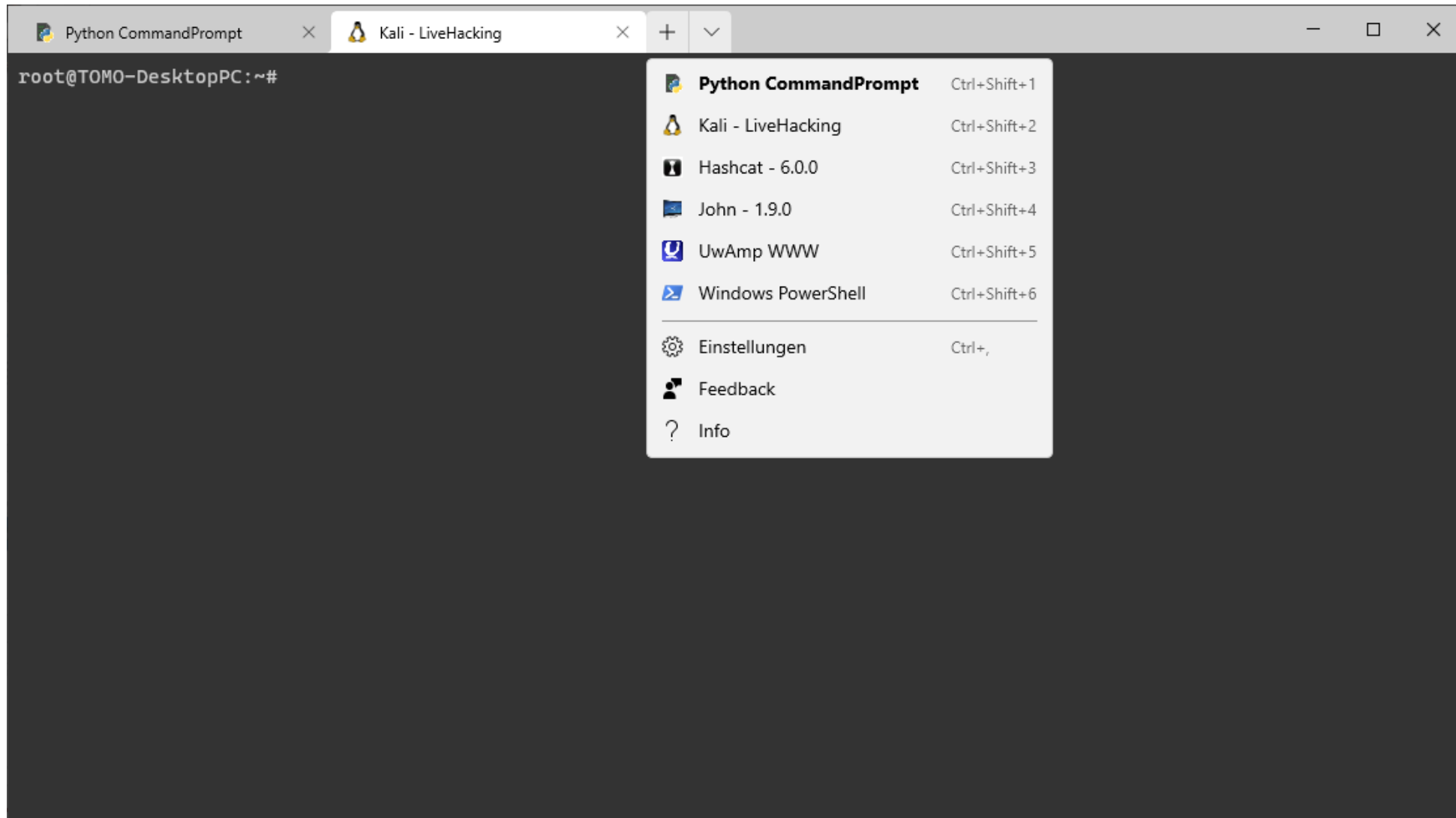
```
tomo@TOMO-DesktopPC: ~
Installing, this may take a few minutes...
Please create a default UNIX user account. The username does not need to match your Windows username.
For more information visit: https://aka.ms/wslusers
Enter new UNIX username: tomo
New password:
Retype new password:
passwd: password updated successfully
Installation successful!
(Message from Kali developers)

This is a minimal installation of Kali Linux, you likely
want to install supplementary tools. Learn how:
  https://www.kali.org/docs/troubleshooting/common-minimum-setup/

(Run "touch ~/.hushlogin" to hide this message)
(tomo@TOMO-DesktopPC)-[~]
$ _
```



# Windows Terminal





# Putty

Putty war einer der meistverwendeten SSH Clients unter Windows. Putty ist kostenlos.

```
tomo@TOMO-DesktopPC: ~  
login as: tomo  
tomo@172.24.92.77's password:  
Linux TOMO-DesktopPC 4.19.104-microsoft-standard #1 SMP Wed Feb 19 06:37:35 UTC  
2020 x86_64  
  
The programs included with the Kali GNU/Linux system are free software;  
the exact distribution terms for each program are described in the  
individual files in /usr/share/doc/*/copyright.  
  
Kali GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent  
permitted by applicable law.  
tomo@TOMO-DesktopPC:~$
```

**PuTTY Configuration**

Category: **Session**

Basic options for your PuTTY session

Specify the destination you want to connect to

Host Name (or IP address)  Port

Connection type:  
☐ Raw ☐ Telnet ☐ Rlogin ☒ SSH ☐ Serial

Load, save or delete a stored session

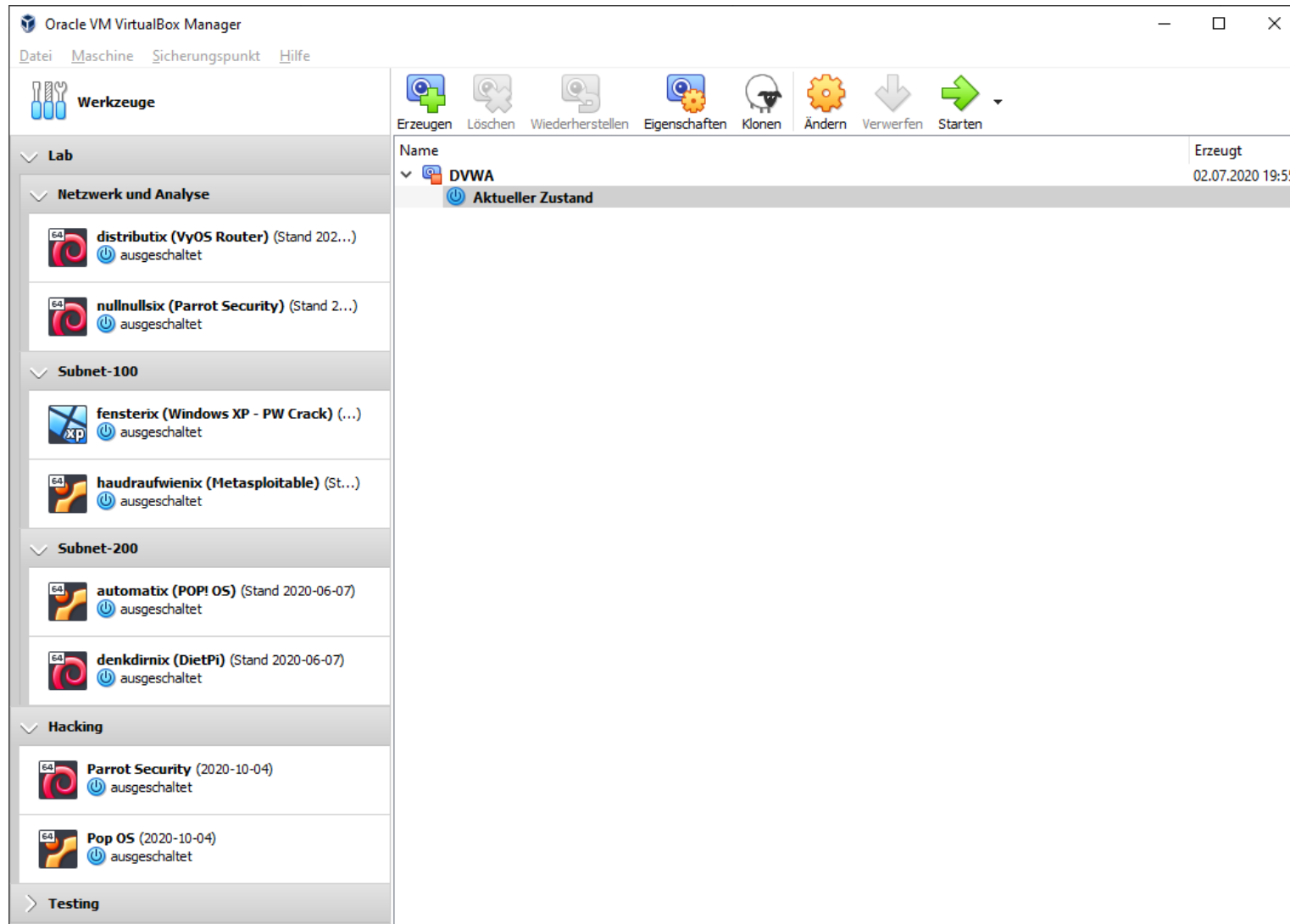
Saved Sessions

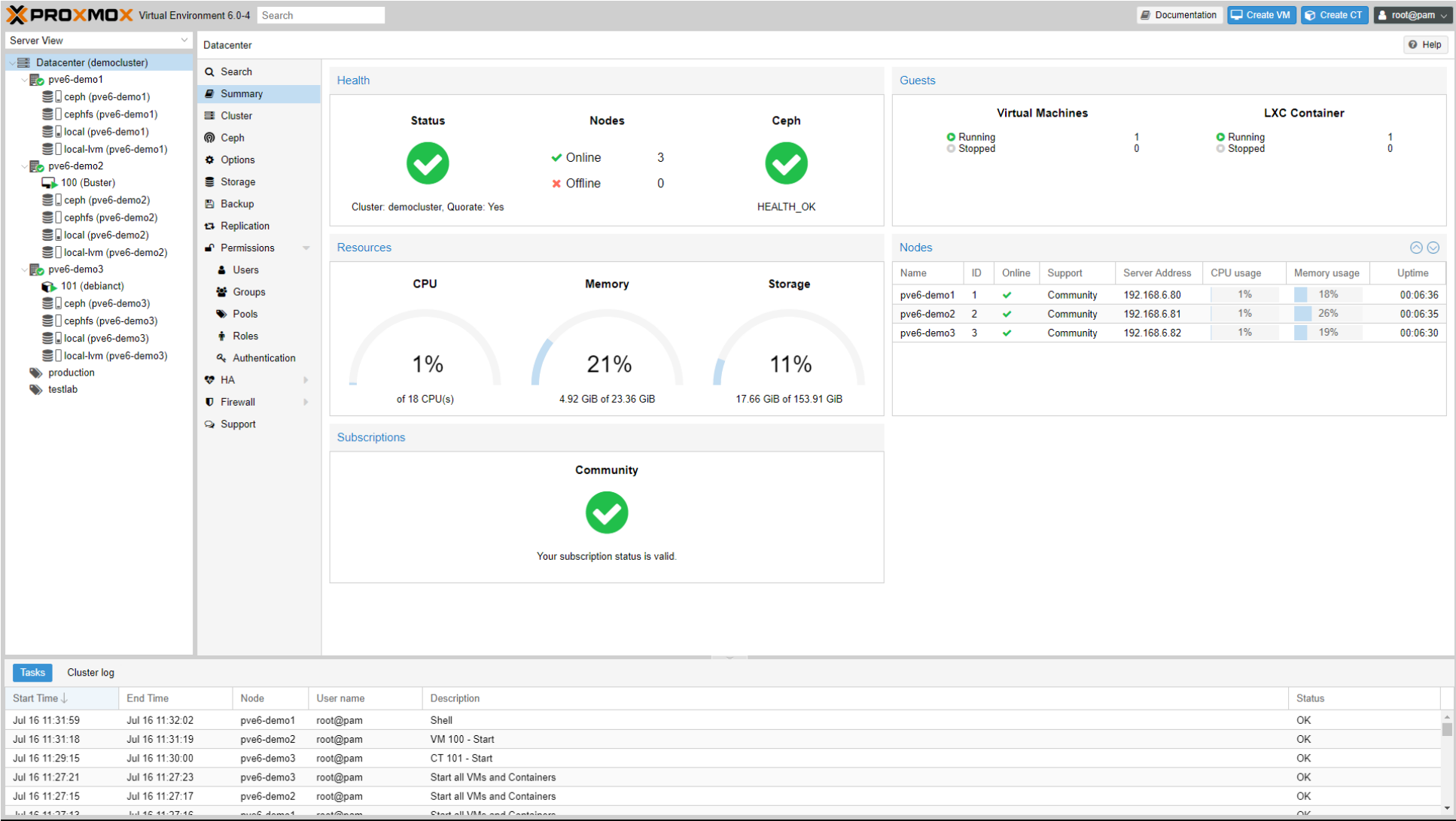
Default Settings  
Kali Linux in VirtualBox  
Raspi Initial (FritzBox)  
Raspi Initial (Link Lokal)  
TOMO-NAS  
TOMO-PI-1-Bplus-01  
TOMO-PI-1-Bplus-02

Close window on exit:  
☐ Always ☐ Never ☒ Only on clean exit



# VirtualBox

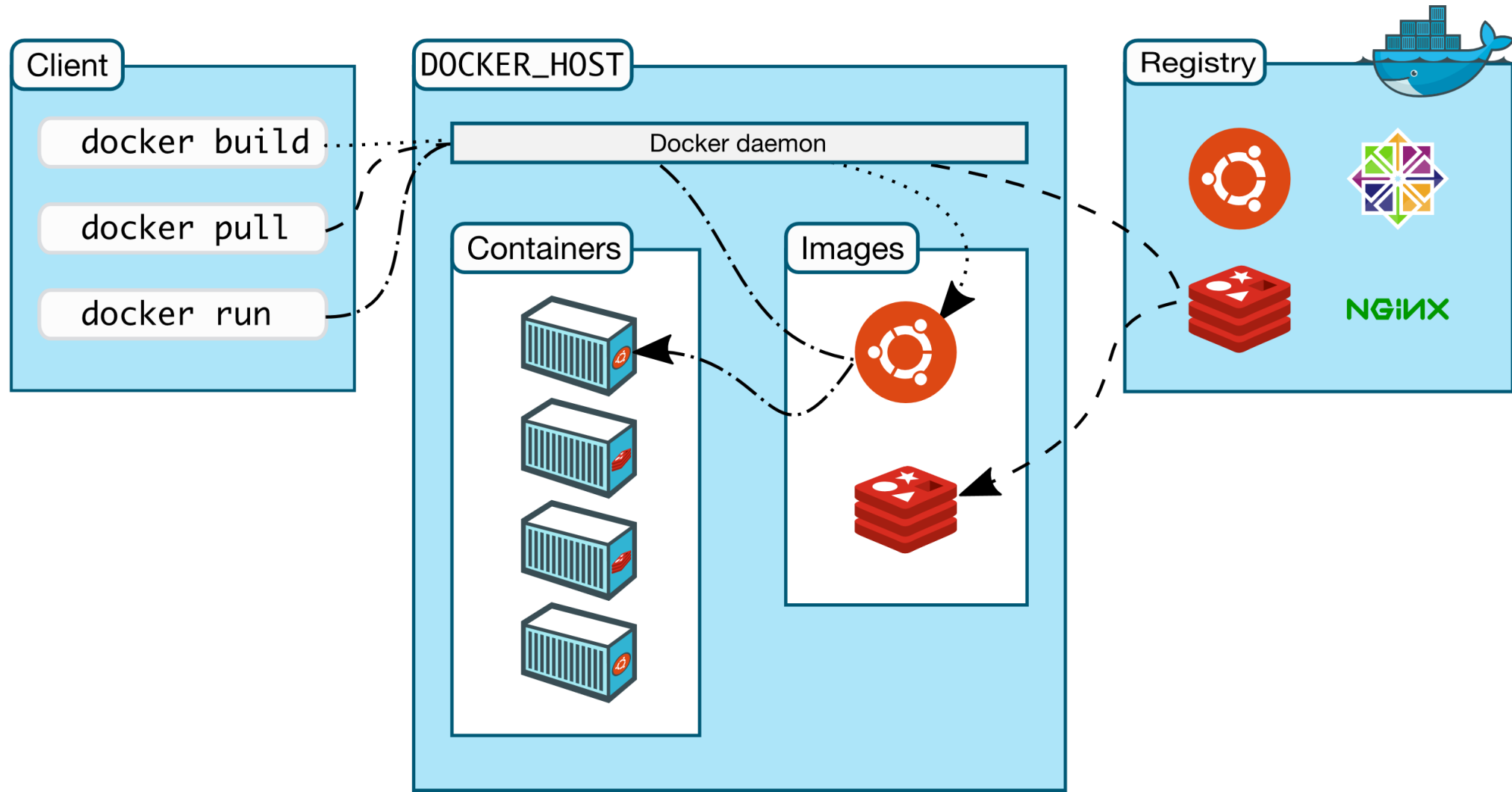









# Docker





 portainer.io

Home

KASM

Dashboard

App Templates

Stacks

Containers

Images

Networks

Volumes

Events

Host

SETTINGS

Users

Environments

Registries

Authentication logs

Settings

A new version is available

portainer.io 2.11.0

## Container list

Containers

tomo  
[my account](#) [log out](#)

Containers Columns Settings

Start Stop Kill Restart Pause Resume Remove Add container

Search...

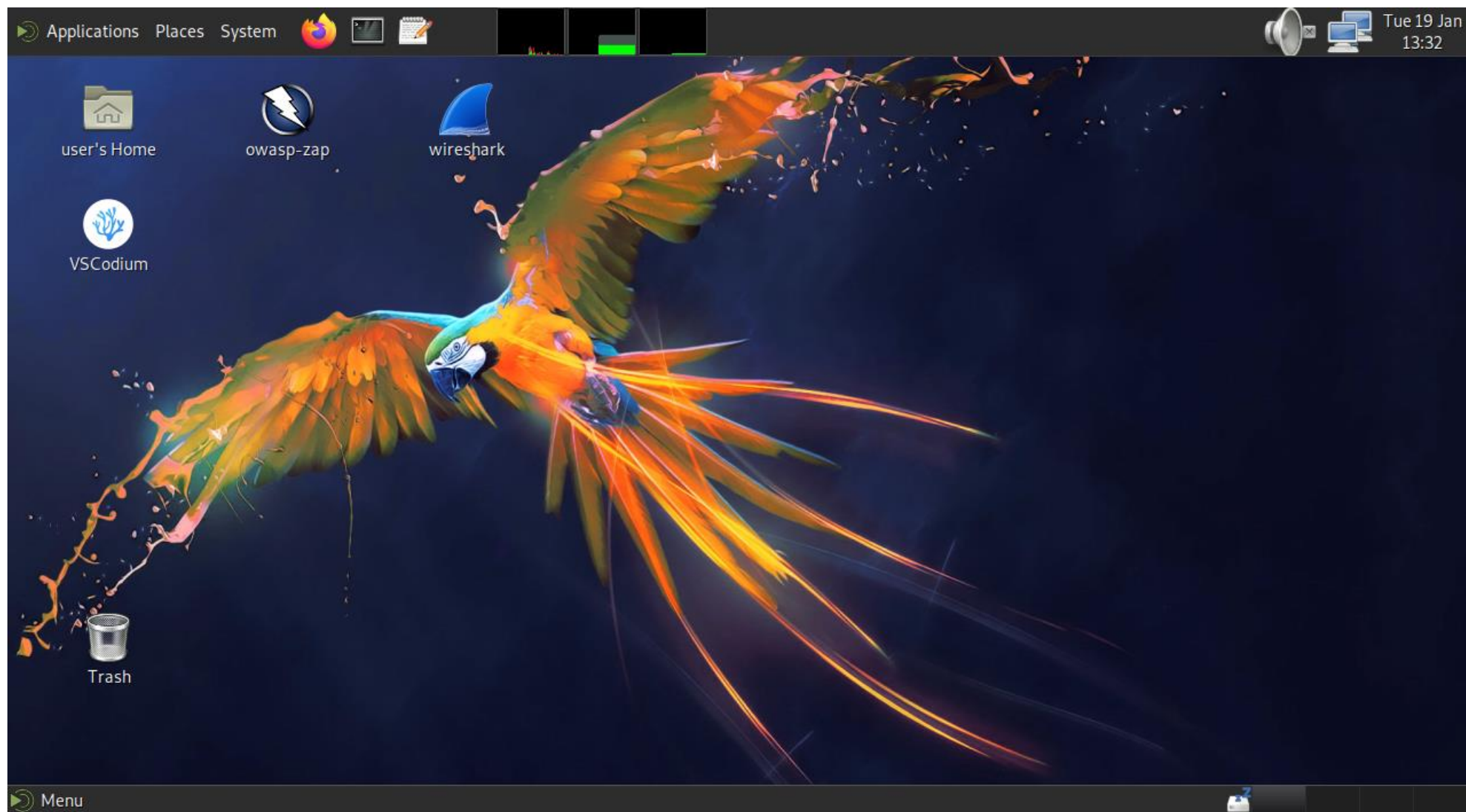
<input type="checkbox"/>	Name	State <div>Filter</div>	Quick actions	Stack	Image	Created	IP Address	Published Ports	Ownership
<input type="checkbox"/>	portainer	running	<div></div>	-	portainer/portainer-ce:2.11.0	2021-12-10 21:31:45	172.17.0.3	<div>8000:8000</div> <div>9000:9000</div> <div>9443:9443</div>	administrators
<input type="checkbox"/>	portainer_agent	running	<div></div>	-	portainer/agent	2021-12-08 10:15:12	172.17.0.2	<div>9001:9001</div>	administrators

Items per page 10 1 2



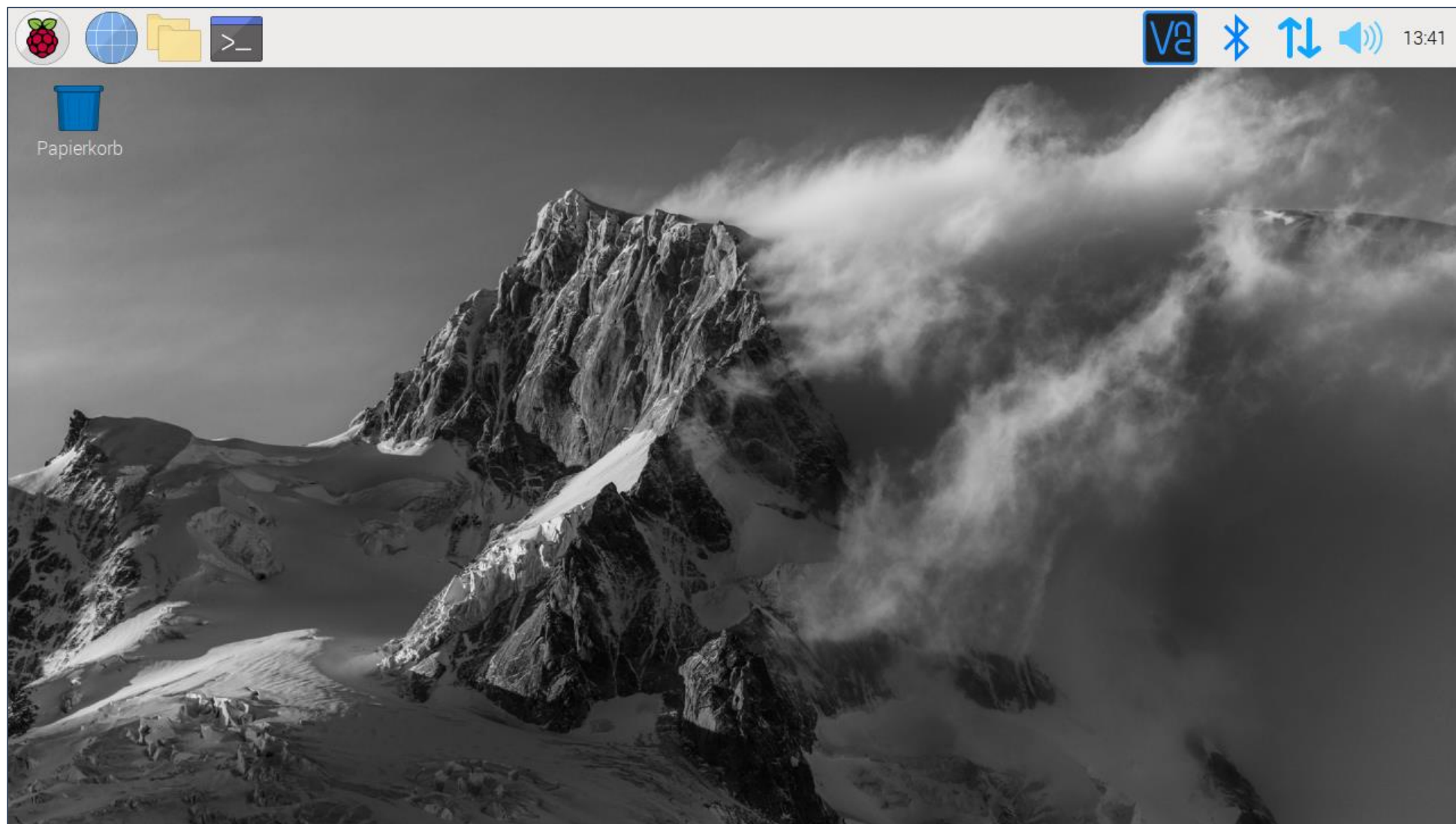


# Parrot Security





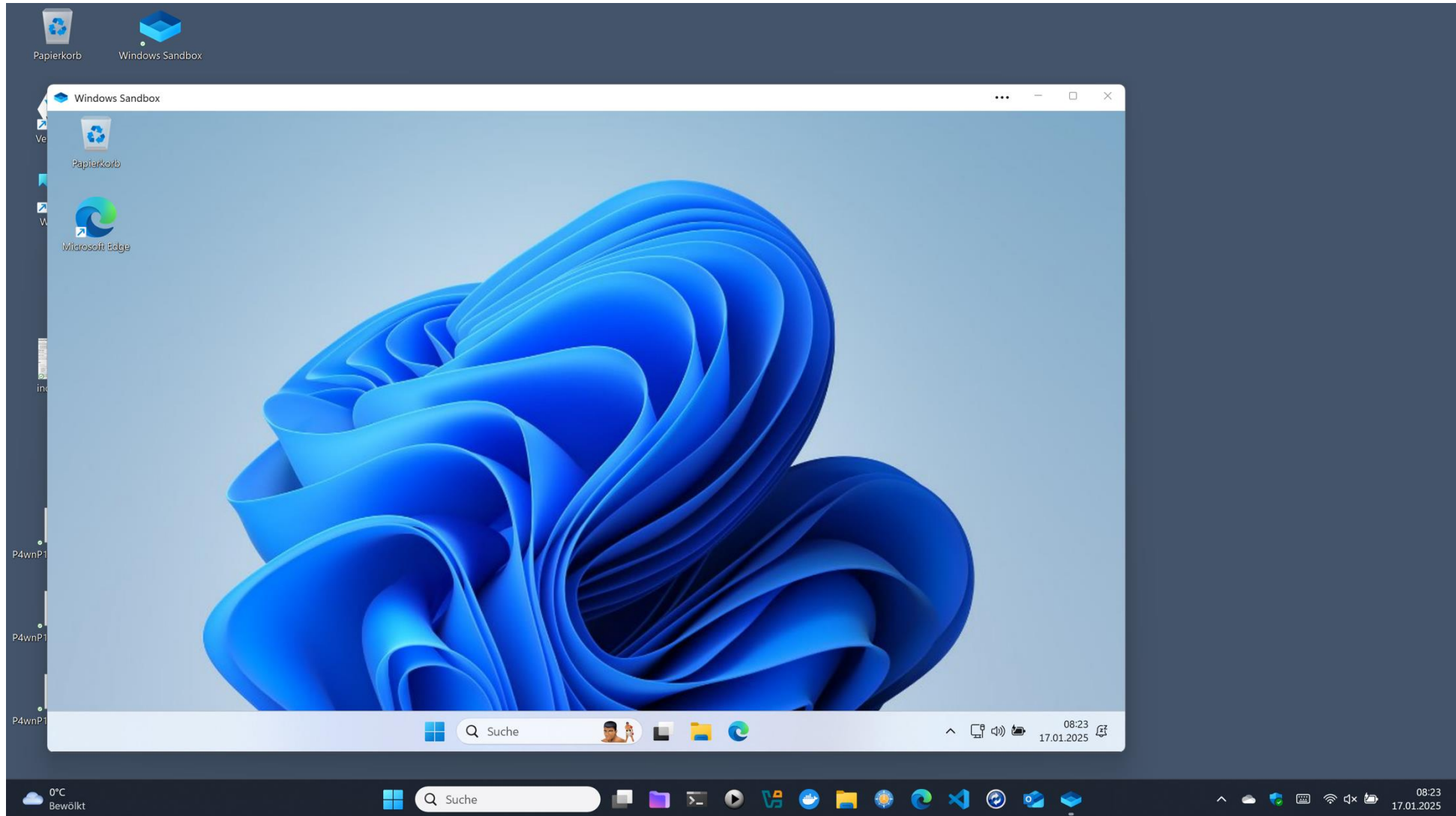
# Raspberry Pi OS





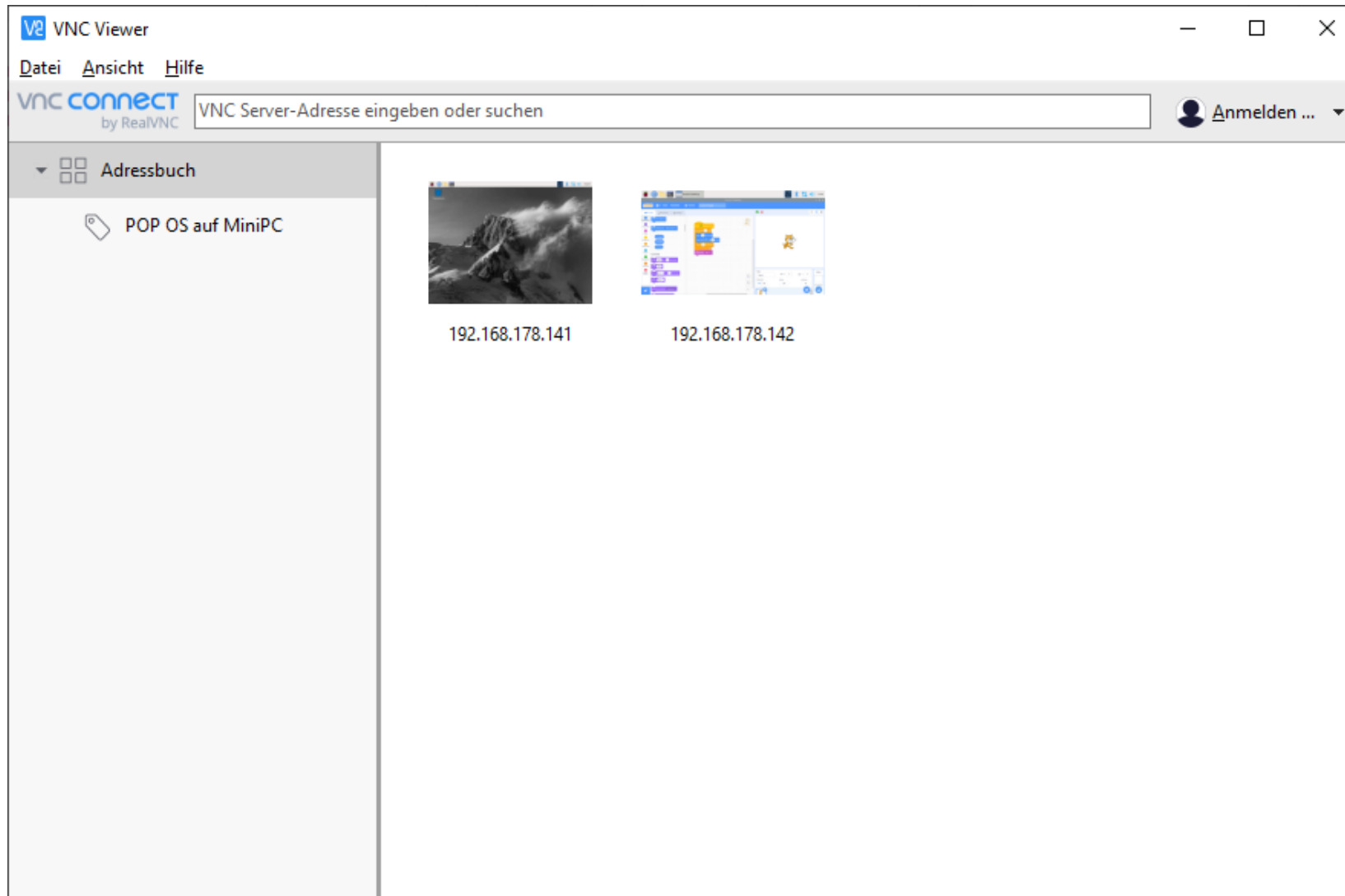


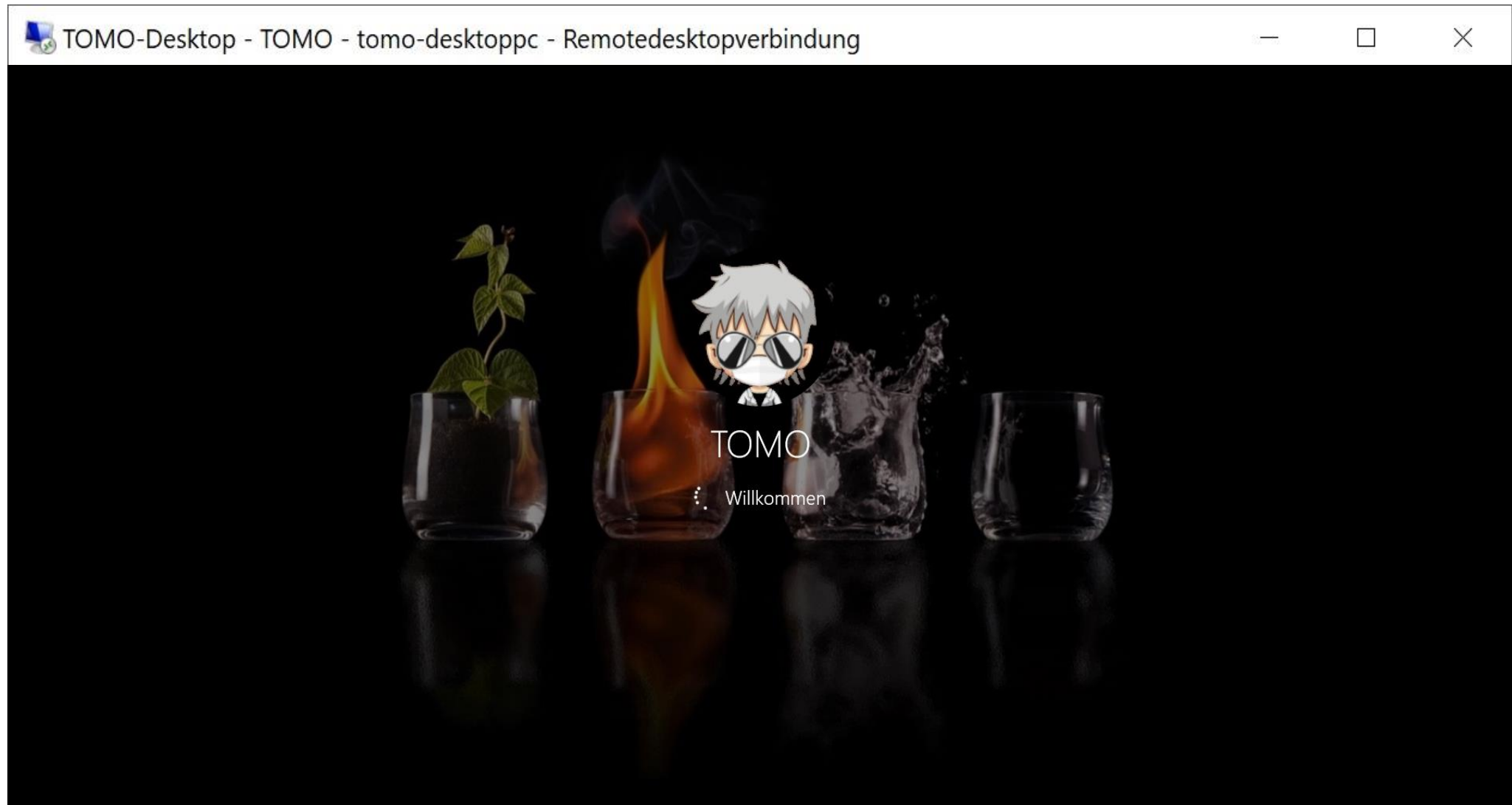
# Windows Sandbox





# VNC Viewer









# NirSoft und SysInternals

NirLauncher - NirSoft Utilities

File Edit View Options Launcher Packages Help

Password Recovery Utilities	Network Monitoring Tools	Web Browser Tools	Video/Audio Related Utilities	Internet Related Utilities	Command-Line Utilities
Desktop Utilities	Outlook/Office Utilities	Programmer Tools	Disk Utilities	System Utilities	Other Utilities
All Utilities					

Name	Description	Version	Updated On	Web Page URL	EXE Filename	EXE Modifie...	EXE Created Time	GUI/C...	Help F...	In Favorites
DevManView	Alternative to the stand...	1.80	06.09.2023 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	06.09.2023 1...	06.09.2023 11:31:38	GUI A...	C:\Use...	No
DriverView	Displays the list of all d...	1.51	05.08.2024 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	05.08.2024 1...	05.08.2024 10:03:42	GUI A...	C:\Use...	No
EventLogChannelsView	View,Disable,Enable Eve...	1.38	28.09.2023 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	28.09.2023 1...	28.09.2023 12:38:48	GUI A...	C:\Use...	No
EventLogSourcesView	Displays the list of all e...	1.00	09.08.2013 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	09.08.2013 1...	09.08.2013 10:19:04	GUI A...	C:\Use...	No
ExecutedProgramsList	Displays programs and ...	1.11	18.03.2016 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	18.03.2016 1...	18.03.2016 11:11:04	GUI A...	C:\Use...	No
FirmwareTablesView	Displays a list of firmwa...	1.02	06.08.2022 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	06.08.2022 0...	06.08.2022 09:44:20	GUI A...	C:\Use...	No
FolderChangesView	Monitor folder/drive ch...	2.37	28.08.2024 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	28.08.2024 1...	28.08.2024 16:04:20	GUI A...	C:\Use...	No
FolderTimeUpdate	Updates the 'Modified ...	1.72	22.08.2023 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	22.08.2023 1...	22.08.2023 19:30:12	GUI A...	C:\Use...	No
FullEventLogView	Event log viewer for Wi...	1.80	22.09.2023 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	22.09.2023 1...	22.09.2023 12:43:22	GUI A...	C:\Use...	No
HandleCountersView	Shows handle counter f...	1.19	15.08.2024 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	15.08.2024 1...	15.08.2024 15:05:12	GUI A...	C:\Use...	No
InstalledAppView	View installed Windows...	1.09	04.09.2024 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	04.09.2024 1...	04.09.2024 11:21:58	GUI A...	C:\Use...	No
InstalledDriversList	Lists all device drivers t...	1.06	21.09.2024 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	21.09.2024 1...	21.09.2024 16:20:34	GUI A...	C:\Use...	No
InstalledPackagesView	Displays installed MSI p...	1.10	16.04.2024 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	16.04.2024 1...	16.04.2024 15:59:46	GUI A...	C:\Use...	No
JumpListsView	Displays the informatio...	1.16	25.03.2018 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	25.03.2018 2...	25.03.2018 22:45:50	GUI A...	C:\Use...	No
KeyboardStateView	Shows the current stat...	1.00	23.03.2018 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	23.03.2018 2...	23.03.2018 21:25:28	GUI A...	C:\Use...	No
LastActivityView	View the latest comput...	1.37	28.03.2023 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	28.03.2023 1...	28.03.2023 11:20:00	GUI A...	C:\Use...	No
LoadedDLLsView	Displays all DLL files loa...	1.06	24.09.2022 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	24.09.2022 1...	24.09.2022 14:28:12	GUI A...	C:\Use...	No
ManageWirelessNetworks	Alternative tool to the s...	1.14	17.06.2024 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	17.06.2024 1...	17.06.2024 10:17:20	GUI A...	C:\Use...	No
MMCSnapInsView	Displays the details of a...	1.00	25.11.2015 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	25.11.2015 0...	25.11.2015 08:06:32	GUI A...	C:\Use...	No
MonitorInfoView	displays essential infor...	1.25	23.10.2024 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	23.10.2024 1...	23.10.2024 18:01:40	GUI A...	C:\Use...	No
MUICacheView	Edit/delete MUICache it...	1.01	05.01.2010 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	05.01.2010 1...	05.01.2010 14:49:12	GUI A...	C:\Use...	No
MultiMonitorTool	Enable,disable,and set t...	2.15	16.10.2024 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	16.10.2024 1...	16.10.2024 10:36:14	GUI A...	C:\Use...	No
MyEventViewer	MyEventViewer is a sim...	2.25	15.01.2017 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	15.01.2017 1...	15.01.2017 19:49:20	GUI A...	C:\Use...	No
NetworkInterfacesView	Displays the list of all n...	1.35	29.10.2023 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	29.10.2023 1...	29.10.2023 15:03:52	GUI A...	C:\Use...	No
OfflineRegistryFinder	Find data in external Re...	1.10	20.04.2020 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	20.04.2020 0...	20.04.2020 09:32:12	GUI A...	C:\Use...	No
OfflineRegistryView	View offline Registry files	1.03	26.04.2019 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	26.04.2019 1...	26.04.2019 13:27:40	GUI A...	C:\Use...	No
OpenedFilesView	Displays the list of all o...	1.91	31.08.2023 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	31.08.2023 1...	31.08.2023 18:30:50	GUI A...	C:\Use...	No
OpenSaveFilesView	Displays list of files that...	1.16	14.11.2022 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	14.11.2022 1...	14.11.2022 14:09:36	GUI A...	C:\Use...	No
Password Security Scanner	Displays security inform...	1.61	08.07.2020 ...	https://www.nirsoft.net/...	C:\Users\LiveHacking\One...	08.07.2020 1...	08.07.2020 11:16:50	GUI A...	C:\Use...	No

Run Advanced Run Web Page Help File Web Search Package Package

85 Utilities, 1 Selected NirSoft Freeware. https://www.nirsoft.net



# NirSoft und SysInternals

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Run Advanced Run Web Page Help File Web Search Package Package

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**Anmerkungen oder Fragen?**