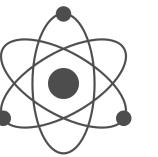
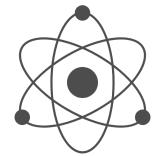


Beginner's Guide to Starting a

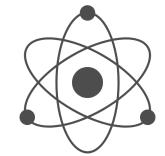


SECURITY HOME LAB





YOUR LAB ASSISTANT

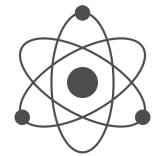


- Software engineer
- Penetration tester
- Red team operator
- Product security engineer
- Home lab enthusiast

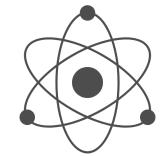


LINKEDIN.COM/IN/JKEELER





LEARNING OBJECTIVES



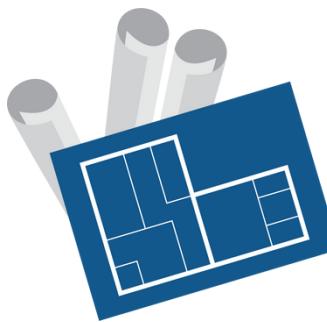
Introduction

HELLO
my name is...

Goals



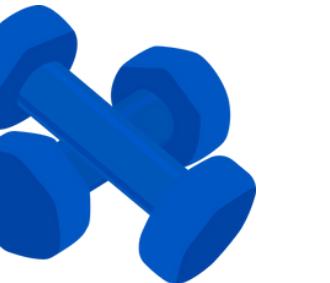
Architecture



Core Build

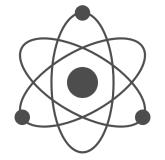


Exercises

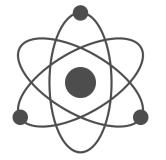


Isolation

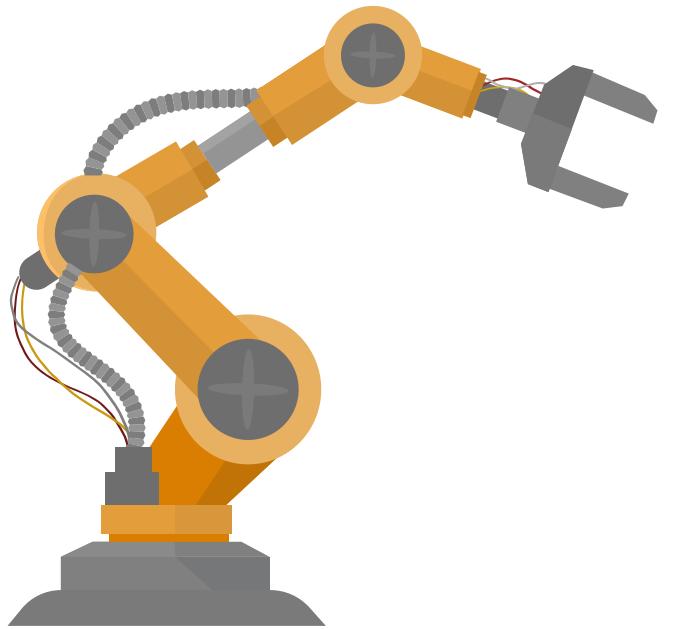




LEARNING OBJECTIVES



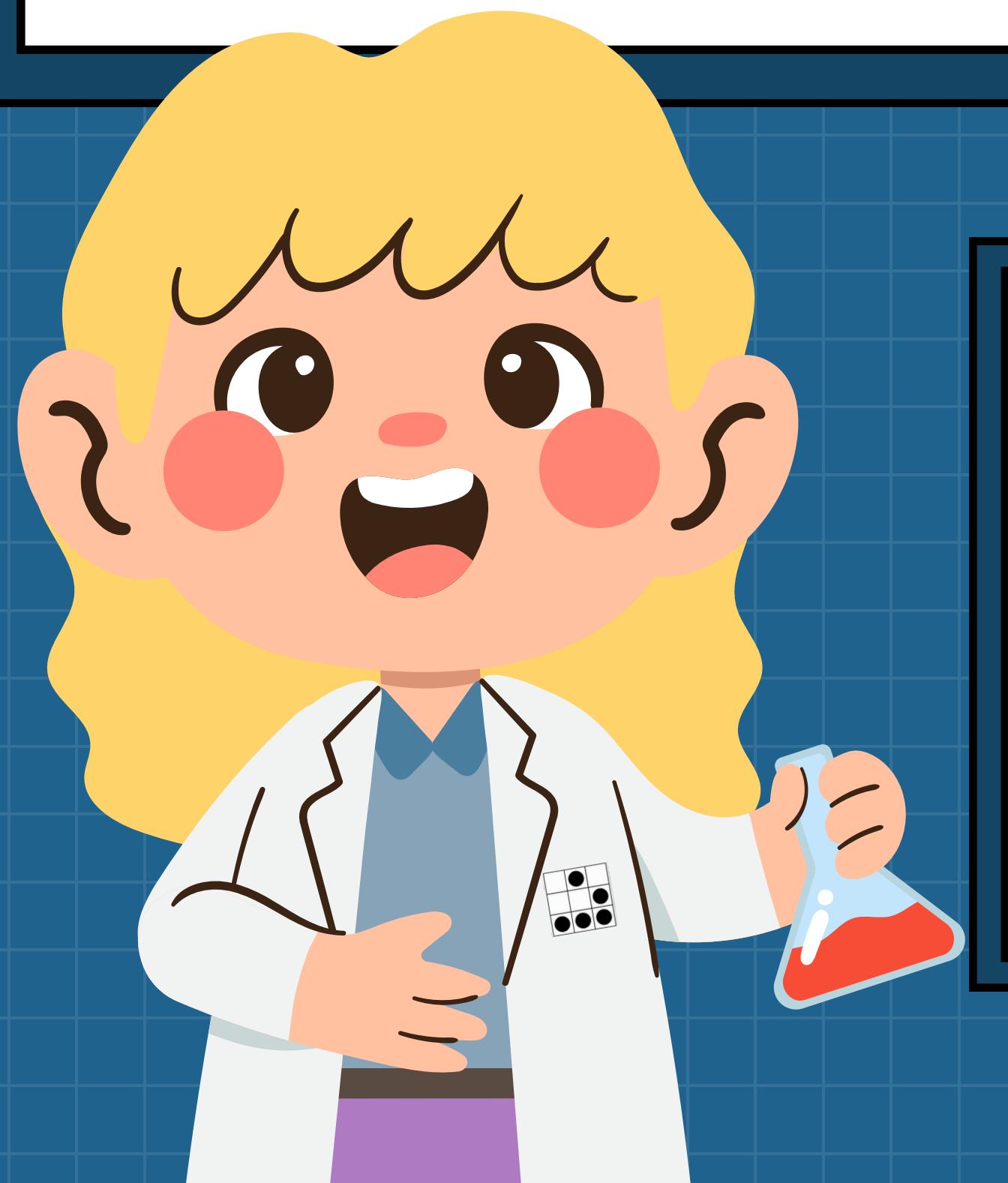
Scaling & Automation



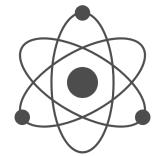
Resources & Lab Tour



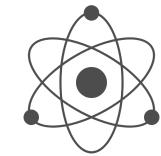
INTRODUCTION



- Home lab vs. Cyber range
- Why home labs matter
- Real-world use cases



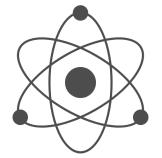
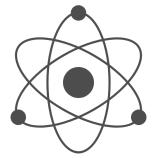
DEFINE YOUR GOALS



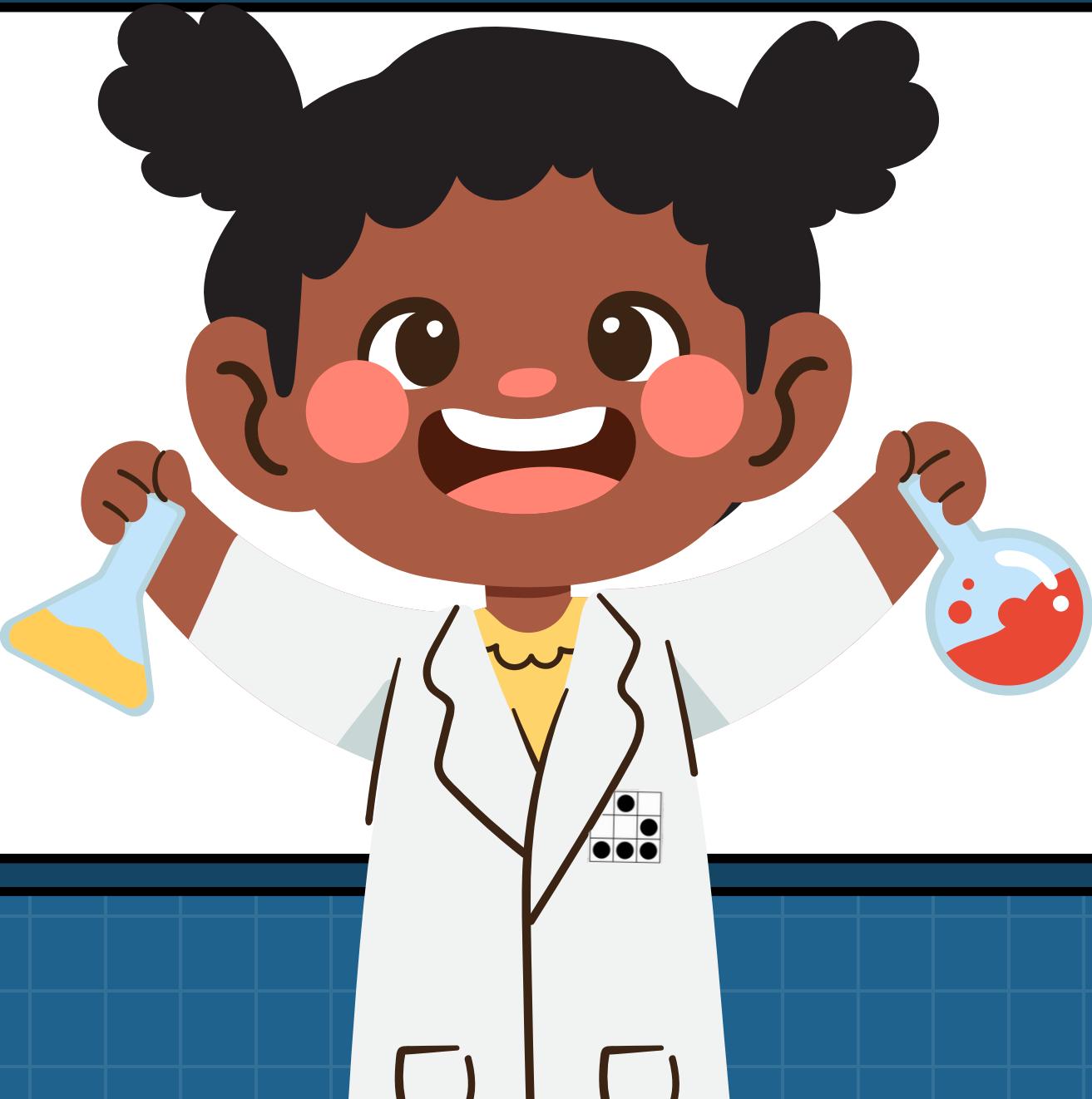
- What's your focus?
- Create targeted goals

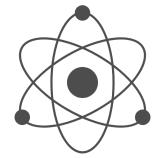


LAB ARCHITECTURE

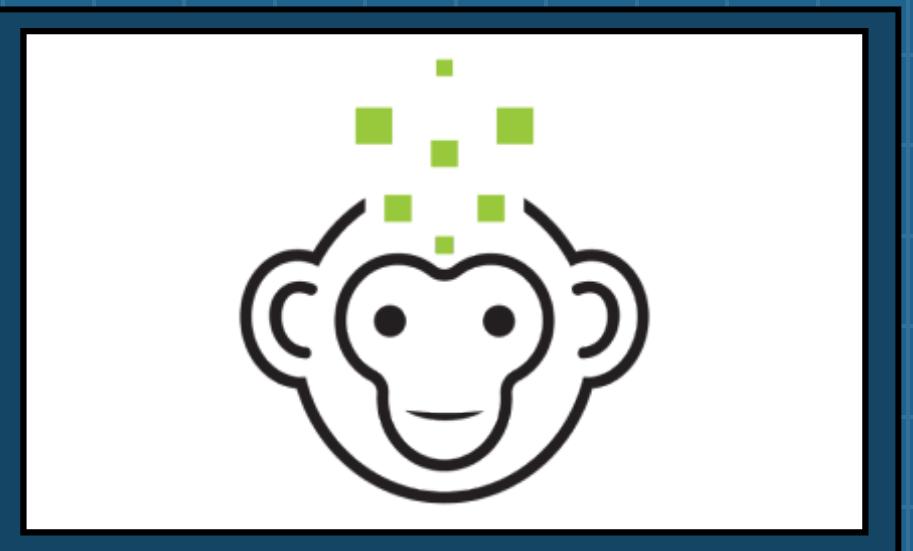
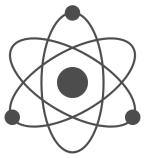


- Hardware sourcing
- Virtualization
- Network design

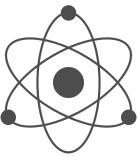
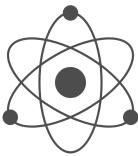




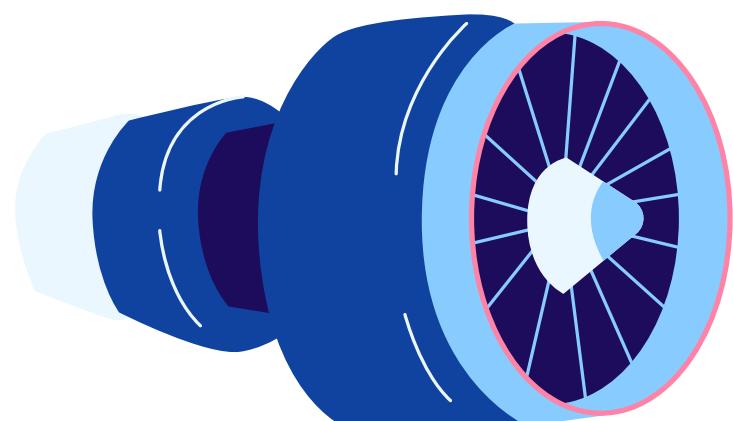
HARDWARE SOURCING



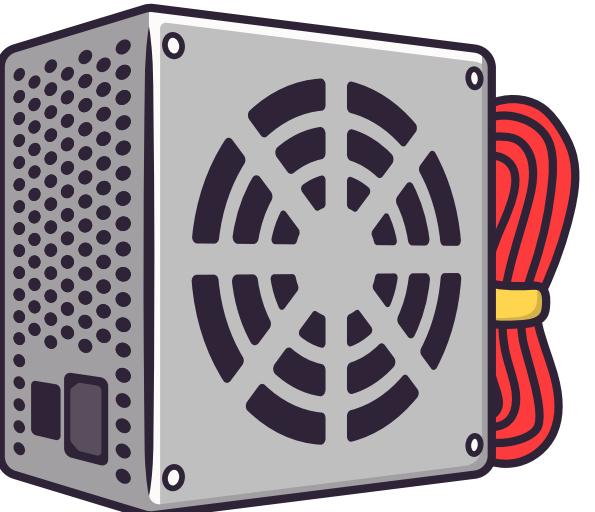
HARDWARE REQUIREMENTS



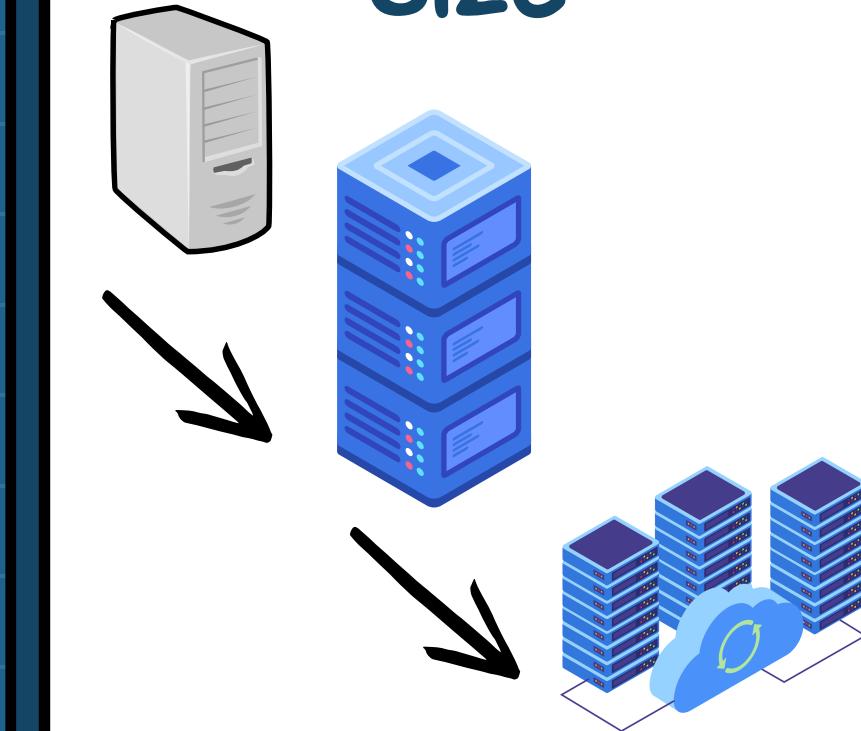
Noise



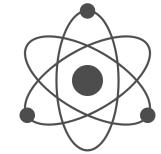
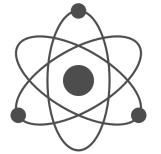
Power



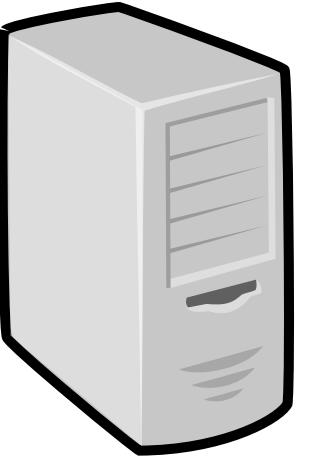
Size



VIRTUALIZATION



Bare metal



Bare metal
hypervisor



vmware
ESXi



PROXMOX



Microsoft
Hyper-V

Hosted
hypervisor



Parallels™

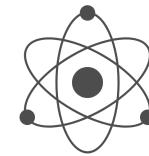
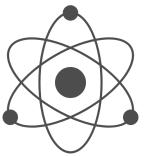


vmware®
Workstation



libvirt
VIRTUALIZATION API

NETWORK DESIGN



- Segmentation
- VLANs
- Isolation

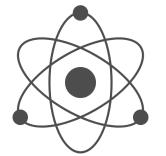
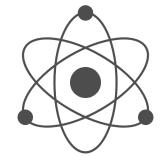


CORE LAB BUILD



- Choose your own adventure
- Today's adventure
 - Proxmox
 - Portainer

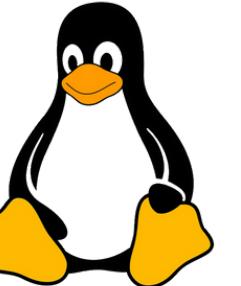
VM SETUP



Attacker



Victim

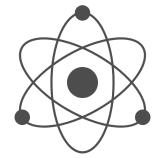


Microsoft
Windows xp

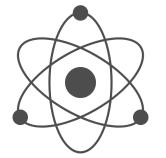
Monitoring
Host



w.



VM SETUP TIPS



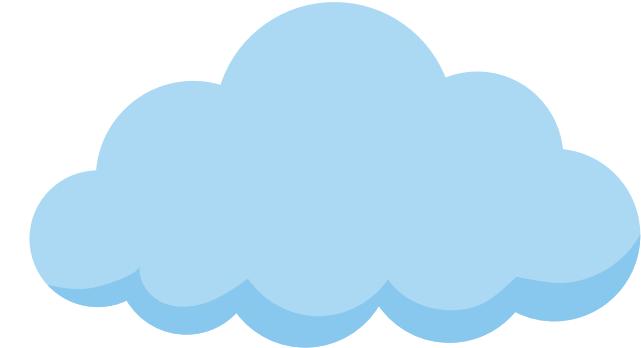
Snapshots



Templates

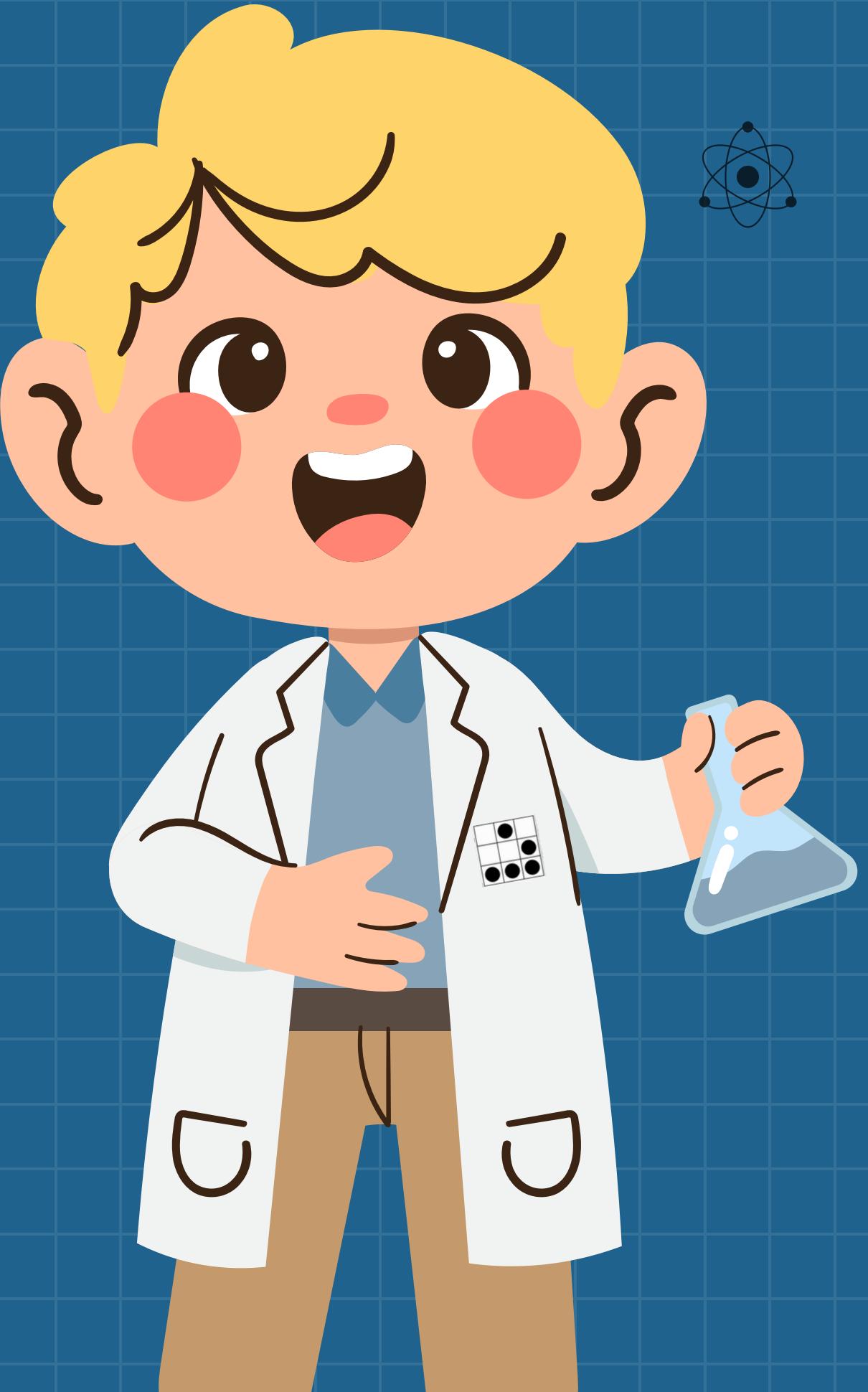


Cloud images



PROXMOX

- Open source
- Enterprise virtualization
- Support for
 - VMs and containers
 - Software defined networking
 - Clustering



pve - Proxmox Virtual En... +

Not secure https://192.168.122.140:8006/#v1:0:18:4::::8:: Guest (2) :

PROXMOX Virtual Environment 8.3.0

Search

Documentation Create VM Create CT root@pam Help

Server View Datacenter

Datacenter

Search:

Type ↑	Description	Disk usage...	Memory us...	CPU usage	Uptime	Host CPU ...	Host Mem...	T...
node	pve	14.3 %	91.6 %	12.2% of 4 ...	00:08:57			
qemu	100 (talos-cp-01)	0.0 %	43.1 %	12.7% of 2 ...	00:06:42	6.3% of 4 ...	22.2 %	term
qemu	101 (talos-worker-02)	0.0 %	27.9 %	2.7% of 4 ...	00:06:37	2.7% of 4 ...	14.4 %	term
qemu	102 (talos-worker-01)	0.0 %	28.3 %	3.1% of 4 ...	00:06:32	3.1% of 4 ...	14.6 %	term
qemu	200 (ubuntu-01)	0.0 %	8.2 %	0.1% of 4 ...	00:06:46	0.1% of 4 ...	4.2 %	term
qemu	201 (portainer)	0.0 %	8.3 %	0.1% of 4 ...	00:07:44	0.1% of 4 ...	4.3 %	term
sdn	localnetwork (pve)				-			
storage	local (pve)	14.3 %			-			
storage	local-lvm (pve)	16.9 %			-			

Tasks Cluster log

Start Time ↓	End Time	Node	User name	Description	Status
Aug 24 21:56:49	Aug 24 21:56:59	pve	root@pam	VM/CT 201 - Console	OK
Aug 24 21:50:35	Aug 24 21:50:38	pve	root@pam	VM 102 - Start	OK
Aug 24 21:50:30	Aug 24 21:50:35	pve	root@pam	VM 101 - Start	OK
Aug 24 21:50:25	Aug 24 21:50:28	pve	root@pam	VM 100 - Start	OK
Aug 24 21:49:23	Aug 24 21:49:28	pve	root@pam	VM 201 - Start	OK

pve - Proxmox Virtual Env +

Not secure https://192.168.122.140:8006/#v1:0::qemu%2F201:4:::8:

Guest (2)

PROXMOX Virtual Environment 8.3.0

Search

Server View

Virtual Machine 201 (portainer) on node 'pve' terraform ubuntu ↗

Start Shutdown Console More Help

Datacenter

- pve
 - 100 (takos-cp-01) ●
 - 101 (takos-worker-02) ●
 - 102 (takos-worker-01) ●
 - 200 (ubuntu-01) ● ●
 - 201 (portainer) ● ●
- localnetwork (pve)
- local (pve)
- local-hvm (pve)

Summary

Console

Hardware

Cloud-Init

Options

Task History

Monitor

Backup

Replication

Snapshots

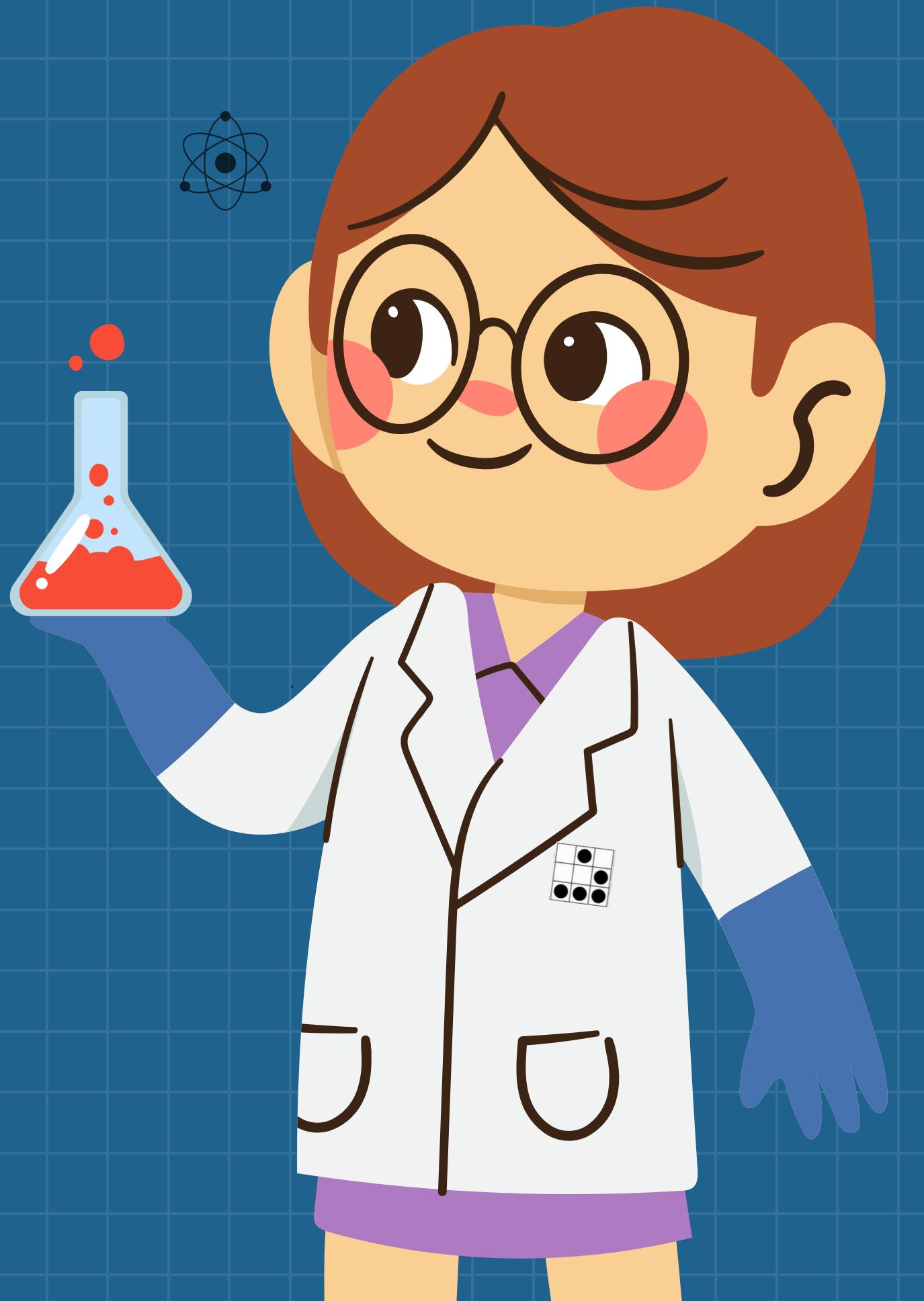
Firewall

Permissions

Ubuntu 24.04.2 LTS portainer ttys1

portainer login:

Start Time	End Time	Node	User name	Description	Status
Aug 24 21:55:49		pve	root@pam	VM/CT 201 - Console	
Aug 24 21:50:35	Aug 24 21:50:38	pve	root@pam	VM 102 - Start	OK
Aug 24 21:50:30	Aug 24 21:50:35	pve	root@pam	VM 101 - Start	OK
Aug 24 21:50:25	Aug 24 21:50:28	pve	root@pam	VM 100 - Start	OK
Aug 24 21:49:23	Aug 24 21:49:28	pve	root@pam	VM 201 - Start	OK



PORTAINER

- Community edition
- Container management
- Easy-to-use UI
- Support for
 - Docker
 - Docker swarm
 - Kubernetes
 - Podman
 - Azure ACI

[Upgrade to Business Edition](#)

Environment summary



Home

local

Dashboard

Templates

Stacks

Containers

Images

Networks

Volumes

Events

Host

Administration

User-related

Environment-related

Registries

Logs

Notifications

Settings

Dashboard

Environment info

Environment local ⚡ 2 🛠 10.8 GB - Standalone 28.3.3

URL /var/run/docker.sock

GPU none

Tags



31

Stacks



28

Containers



23 running
0 healthy



5 stopped
0 unhealthy



114

Images

97.2 GB



48

Volumes



13

Networks

```
services:  
  kavita:  
    image: jvmilazz0/kavita:latest  
    container_name: kavita  
    volumes:  
      - /your/path/to/manga:/manga  
      - /your/path/to/comics:/comics  
      - /your/path/to/books:/books  
      - /your/path/to/saved/config:/kavita/config  
    environment:  
      - TZ=Your/Timezone  
    ports:  
      - "5000:5000"  
    restart: unless-stopped
```

[Upgrade to Business Edition](#)



[Home](#)

[local](#)

[Dashboard](#)

[Templates](#)

[Stacks](#)

[Containers](#)

[Images](#)

[Networks](#)

[Volumes](#)

[Events](#)

[Host](#)

[Administration](#)

[User-related](#)

[Environment-related](#)

[Registries](#)

[Logs](#)

[Notifications](#)

[Settings](#)

Stacks > kavita

Stack details

[Stack](#)

[Editor](#)

Stack details

kavita

[Stop this stack](#)

[Delete this stack](#)

[+ Create template from stack](#)

Stack duplication / migration

This feature allows you to duplicate or migrate this stack.

Stack name (optional for migration)

Select...

[Migrate](#)

[Duplicate](#)

Containers

Search...

[Start](#)

[Stop](#)

[Restart](#)

[Pause](#)

[Resume](#)

[Remove](#)

[I](#)

Name

State

Quick Actions

Stack

Image

Created

IP Address

Published Ports

Ownership

kavita-kavita-1

Up

[Start](#)

[Stop](#)

[Restart](#)

[Pause](#)

[Resume](#)

[Remove](#)

[I](#)

kavita

jvmilazz0/kavita:0.8.6

2025-08-13 22:39:57

172.23.0.12

-

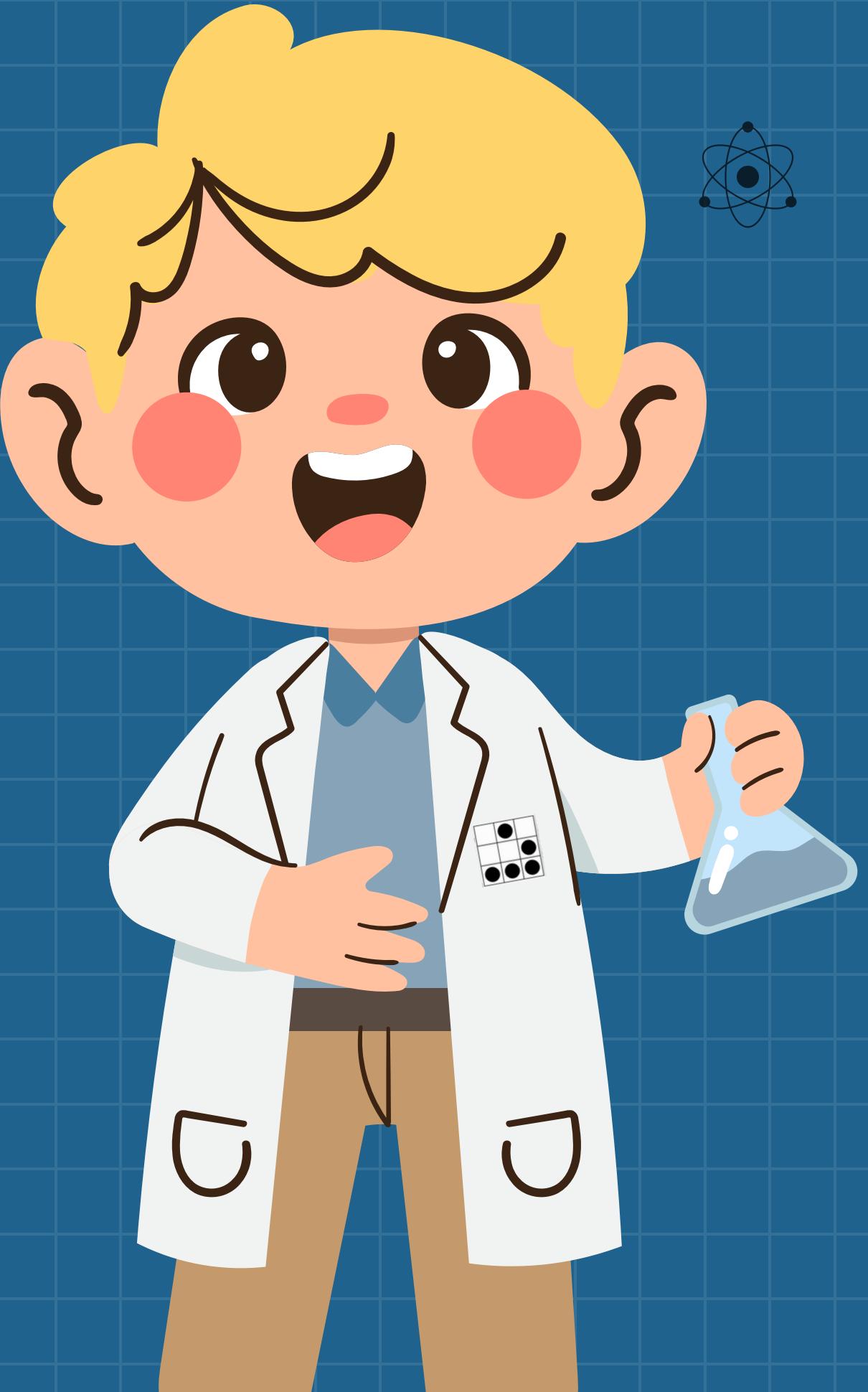
administrators

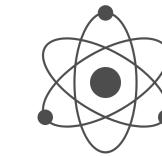
Items per page [10](#)

Access control

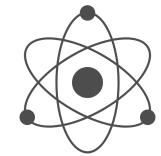
EXERCISES

- Exploitation
- Reverse Engineering
- Detection



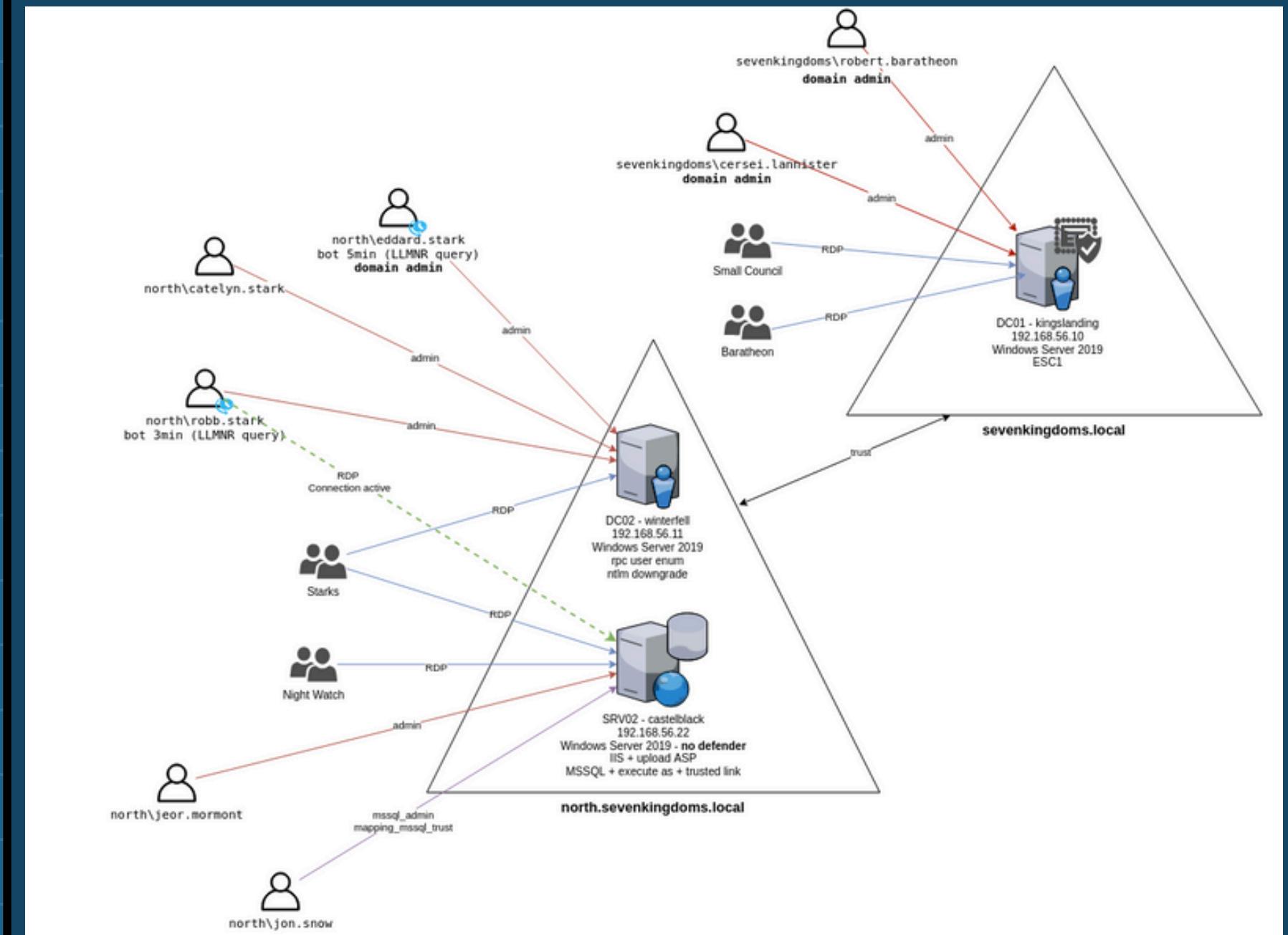


GAME OF ACTIVE DIRECTORY

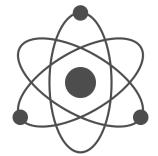
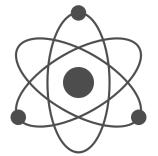


GOAD

- Five different labs
- MINI lab →
 - 2 VMs
 - 1 Forest
 - 1 Domain
 - 1 Workstation



EXPLOITATION



Stage your
systems

Run exploit

Escalate
privileges

ISO UPLOAD

pve - Proxmox Virtual Environment - Chromium

Not secure https://192.168.122.140:8006/#v1:0::storage%2Fpve%2Flocal:4::contentiso::8::

Guest (2) ···

PROXMOX Virtual Environment 8.3.0 Search

Documentation Create VM Create CT root@pam Help

Server View Datacenter

Datacenter

Search Type ↑ Description Disk usage... Memory us... CPU usage Uptime Host CPU ... Host Mem... T...

Type ↑	Description	Disk usage...	Memory us...	CPU usage	Uptime	Host CPU ...	Host Mem...	T...
node	pve	14.3 %	63.7 %	11.7% of 4 ...	01:18:18	-	-	-
qemu	100 (talos-cp-01)	0.0 %	42.2 %	11.9% of 2 ...	01:16:03	5.9% of 4 ...	21.8 %	terra
qemu	101 (talos-worker-02)	0.0 %	24.8 %	2.7% of 4 ...	01:15:58	2.7% of 4 ...	12.8 %	terra
qemu	102 (talos-worker-01)	0.0 %	25.2 %	2.9% of 4 ...	01:15:52	2.9% of 4 ...	13.0 %	terra
qemu	200 (ubuntu-01)	0.0 %	12.4 %	0.1% of 4 ...	01:18:07	0.1% of 4 ...	6.4 %	terra
qemu	201 (portainer)	0.0 %	12.4 %	0.1% of 4 ...	01:17:05	0.1% of 4 ...	6.4 %	terra
sdn	localnetwork (pve)	-	-	-	-	-	-	-
storage	local (pve)	14.3 %	-	-	-	-	-	-
storage	local-lvm (pve)	16.9 %	-	-	-	-	-	-

Tasks Cluster log

Start Time ↓	End Time	Node	User name	Description	Status
Aug 24 23:06:07	Aug 24 23:06:07	pve	root@pam	Erase data	OK
Aug 24 23:05:53	Aug 24 23:05:53	pve	root@pam	Copy data	OK
Aug 24 23:05:15	Aug 24 23:05:15	pve	root@pam	Erase data	OK
Aug 24 23:04:37	Aug 24 23:04:37	pve	root@pam	VM 103 - Destroy	OK
Aug 24 23:04:25	Aug 24 23:04:26	pve	root@pam	VM 103 - Stop	OK

VICTIM VM CREATION

pve - Proxmox Virtual Environment - Chromium

Not secure https://192.168.122.140:8006/#v1:0:=node%2Fpve:4:::content!iso:::8::

Guest (2) :

PROXMOX Virtual Environment 8.3.0 Search Documentation Create VM Create CT root@pam

Server View Node 'pve'

Datacenter pve

- 100 (talos-cp-01)
- 101 (talos-worker-02)
- 102 (talos-worker-01)
- 200 (ubuntu-01)
- 201 (portainer)
- localnetwork (pve)
- local (pve)
- local-lvm (pve)

Create: Virtual Machine

General OS System CPU Memory Network Confirm

Use CD/DVD disc image file (iso)

Storage: local ISO image:

Guest OS:

Type: Linux Version: 6.x - 2.6 Kernel

Use physical CD/DVD Drive

Do not use any media

Tasks Cluster log

Start Time	End Time	Node	Status
Aug 24 23:07:05	Aug 24 23:07:10	pve	OK
Aug 24 23:06:07	Aug 24 23:06:07	pve	OK
Aug 24 23:05:53	Aug 24 23:05:53	pve	OK
Aug 24 23:05:15	Aug 24 23:05:15	pve	OK
Aug 24 23:04:37	Aug 24 23:04:37	pve	OK

Advanced Back Next

root@pam Copy data

root@pam Erase data

root@pam VM 103 - Destroy

SUCCESSFUL OS INSTALL

pve - Proxmox Virtual Environment - Chromium

Not secure https://192.168.122.140:8006/#v1:0:=qemu%2F103:4::=contentIso:::8:::

Guest (2)

PROXMOX Virtual Environment 8.3.0 Search

Server View

Virtual Machine 103 (win7) on node 'pve' No Tags

Start Shutdown Console More Help

Datacenter

- pve
 - 100 (talos-cp-01)
 - 101 (talos-worker-02)
 - 102 (talos-worker-01)
 - 103 (win7)
- 200 (ubuntu-01)
- 201 (portainer)
- localnetwork (pve)
- local (pve)
- local-lvm (pve)

Summary

Console

Hardware

Cloud-Init

Options

Task History

Monitor

Backup

Replication

Snapshots

Firewall

Permissions

Starting Windows

© Microsoft Corporation

Tasks Cluster log

Start Time	End Time	Node	User name	Description	Status
Aug 24 23:08:39		pve	root@pam	VM/CT 103 - Console	
Aug 24 23:08:38	Aug 24 23:08:39	pve	root@pam	VM/CT 103 - Console	OK
Aug 24 23:08:34	Aug 24 23:08:38	pve	root@pam	VM 103 - Start	OK
Aug 24 23:08:33	Aug 24 23:08:34	pve	root@pam	VM 103 - Create	OK
Aug 24 23:07:05	Aug 24 23:07:10	pve	root@pam	Copy data	OK

VICTIM PREPARATION

pve - Proxmox Virtual Environment - Chromium

Not secure https://192.168.122.140:8006/lfv1:0:=node%2Fpve:4::=contentIso::::

Guest

Documentation Create VM Create CT root@pam

PROXMOX Virtual Environment 8.3.0

Server View Node 'pve'

Search

Type ↑ Description Disk usage... Memory us... CPU usage Uptime Host CPU ... Host Mem... Tags

Type ↑	Description	Disk usage...	Memory us...	CPU usage	Uptime	Host CPU ...	Host Mem...	Tags
qemu	100 (talos-cp-01)	0.0 %	35.4 %	12.3% of 2 ...	2 days 00:13...	6.1% of 4 ...	18.2 %	terraform
qemu	101 (talos-worker-02)	0.0 %	9.3 %	3.1% of 4 ...	2 days 00:13...	3.1% of 4 ...	4.8 %	terraform
qemu	102 (talos-worker-01)	0.0 %	9.5 %	3.4% of 4 ...	2 days 00:13...	3.4% of 4 ...	4.9 %	terraform
qemu	103 (win7)	0.0 %	22.5 %	3.0% of 2 ...	1 day 22:55:28	1.5% of 4 ...	5.8 %	
qemu	104 (kali)	0.0 %	45.2 %	1.3% of 4 ...	02:43:40	1.3% of 4 ...	23.3 %	
qemu	200 (ubuntu-01)	0.0 %	32.5 %	0.1% of 4 ...	2 days 00:15...	0.1% of 4 ...	16.7 %	terraform ubuntu
qemu	201 (portainer)	0.0 %	33.0 %	0.1% of 4 ...	2 days 00:14...	0.1% of 4 ...	17.0 %	terraform ubuntu
sdn	localnetwork (pve)				-			
storage	local (pve)	40.5 %			-			
storage	local-lvm (pve)	64.1 %			-			

Search:

Node 'pve'

- Search
- Summary
- Notes
- Shell
- System
 - Network
 - Certificates
 - DNS
 - Hosts
 - Options
 - Time
 - System Log
- Updates
 - Repositories
- Firewall
- Disks
 - LVM
 - LVM-Thin
 - Directory
 - ZFS
- Ceph
- Replication

Tasks Cluster log

Start Time	End Time	Node	User name	Description	Status
Aug 26 22:01:47	Aug 26 22:02:50	pve	root@pam	VM/CT 103 - Console	OK
Aug 26 21:52:16	Aug 26 21:52:23	pve	root@pam	Copy data	OK
Aug 26 21:38:34	Aug 26 21:38:34	pve	root@pam	Erase data	OK
Aug 26 21:23:31	Aug 26 21:38:20	pve	root@pam	VM/CT 104 - Console	OK
Aug 26 21:08:30	Aug 26 21:23:31	pve	root@pam	VM/CT 104 - Console	OK

ATTACKER PREPARATION

pve - Proxmox Virtual Environment - Chromium

Not secure https://192.168.122.140:8006/#v1:0:=qemu%2F104:4::=content!iso::8::

Guest (2)

Documentation Create VM Create CT root@pam

X PROXMOX Virtual Environment 8.3.0 Search

Virtual Machine 104 (kali) on node 'pve' No Tags

Start Shutdown Console More Help

Datacenter

- pve
 - 100 (talos-cp-01)
 - 101 (talos-worker-02)
 - 102 (talos-worker-01)
 - 103 (win7)
 - 104 (kali)
 - 200 (ubuntu-01)
 - 201 (portainer)
 - localnetwork (pve)
 - local (pve)
 - local-lvm (pve)

Summary

Console

Hardware

Cloud-Init

Options

Task History

Monitor

Backup

Replication

Snapshots

Firewall

Permissions

KALI

KALI GNU/Linux GRUB2

Advanced options for KALI GNU/Linux GNU/Linux

Booting in 8 seconds

Tasks Cluster log

Start Time	End Time	Node	User name	Description	Status
Aug 25 00:20:49		pve	root@pam	VM/CT 104 - Console	
Aug 25 00:20:47	Aug 25 00:20:48	pve	root@pam	VM 104 - Start	OK
Aug 24 23:58:22	Aug 25 00:20:38	pve	root@pam	VM/CT 104 - Console	OK
Aug 24 23:28:31	Aug 24 23:58:22	pve	root@pam	VM/CT 104 - Console	OK
Aug 24 23:28:26	Aug 24 23:28:31	pve	root@pam	VM/CT 104 - Console	OK

EXPLOITATION

pve - Proxmox Virtual Environment - Chromium

Not secure https://192.168.122.140:8006/lv1:0:=node%2Fpve:4::=contentiso::::

Guest root@pam

PROXMOX Virtual Environment 8.3.0

Server View

Datacenter

pve

- 100 (talos-cp-01)
- 101 (talos-worker-02)
- 102 (talos-worker-01)
- 103 (win7)
- 104 (kali)
- 200 (ubuntu-01)
- 201 (portainer)
- localnetwork (pve)
- local (pve)
- local-lvm (pve)

Search

Summary

Notes

Shell

System

- Network
- Certificates
- DNS
- Hosts
- Options
- Time
- System Log

Updates

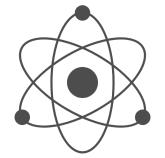
- Repositories
- Firewall
- Disks
 - LVM
 - LVM-Thin
 - Directory
 - ZFS
- Ceph
- Replication

Node 'pve'

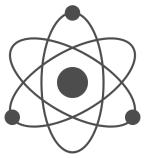
Type	Description	Disk usage...	Memory us...	CPU usage...	Uptime	Host CPU ...	Host Mem...	Tags
qemu	100 (talos-cp-01)	0.0 %	34.4 %	13.9% of 2 ...	2 days 00:23...	6.9% of 4 ...	17.7 %	terraform
qemu	101 (talos-worker-02)	0.0 %	9.2 %	3.4% of 4 ...	2 days 00:23...	3.4% of 4 ...	4.7 %	terraform
qemu	102 (talos-worker-01)	0.0 %	9.4 %	3.4% of 4 ...	2 days 00:23...	3.4% of 4 ...	4.8 %	terraform
qemu	103 (win7)	0.0 %	65.5 %	47.0% of 2 ...	1 day 23:05:08	23.5% of 4 ...	16.9 %	
qemu	104 (kali)	0.0 %	34.9 %	1.4% of 4 ...	02:53:20	1.4% of 4 ...	18.0 %	
qemu	200 (ubuntu-01)	0.0 %	32.5 %	0.1% of 4 ...	2 days 00:25...	0.1% of 4 ...	16.7 %	terraform ubuntu
qemu	201 (portainer)	0.0 %	33.7 %	7.2% of 4 ...	2 days 00:24...	7.2% of 4 ...	17.4 %	terraform ubuntu
sdn	localnetwork (pve)	-	-	-	-	-	-	
storage	local (pve)	40.5 %	-	-	-	-	-	
storage	local-lvm (pve)	64.2 %	-	-	-	-	-	

Tasks Cluster log

Start Time	End Time	Node	User name	Description	Status
Aug 26 22:01:47	Aug 26 22:02:50	pve	root@pam	VM/CT 103 - Console	OK
Aug 26 21:52:16	Aug 26 21:52:23	pve	root@pam	Copy data	OK
Aug 26 21:38:34	Aug 26 21:38:34	pve	root@pam	Erase data	OK
Aug 26 21:23:31	Aug 26 21:38:20	pve	root@pam	VM/CT 104 - Console	OK
Aug 26 21:08:30	Aug 26 21:23:31	pve	root@pam	VM/CT 104 - Console	OK



REVERSE ENGINEERING



Obtain a
sample

Disassemble

Analyze

OBTAİN SAMPLE

The screenshot shows a Windows desktop environment. On the left, there is a vertical sidebar containing several icons: Recycle Bin, config.xml, PS_Transcri..., Visual Studio Code, desktop.ini, desktop.ini, Tools, fakenet_logs, and install.ps1. The main window is a web browser displaying the GitHub page for the 'Cryakl / Ultimate-RAT-Collection' repository. The repository has 585 forks and 3k stars. It contains 1,331 commits from the 'main' branch. A tooltip for a link at the bottom left points to 'https://github.com/topics/malware-database'. The taskbar at the bottom features a red 'ENABLED' button with a green icon, along with other pinned icons like File Explorer, Task View, and Edge. The system tray shows the date and time as 9/2/2025 7:39 PM.

GitHub - Cryakl/Ultimate-RAT-Collection

Platform Solutions Resources Open Source Enterprise Pricing

Search or jump to... Sign in Sign up

Cryakl / Ultimate-RAT-Collection Public

Code Issues 4 Full requests Actions Projects Security Insights

main 1 Branch 0 Tags Go to file Code About

Cryakl Update RPS420 RAT.7z eadlu4c · 2 days ago 1,331 Commits

Only1Rat Update some screenshots 5 months ago

888Rat Unsplit 888Rat/LodaRAT Samples 5 months ago

A311Death Sorting 6 months ago

A32sRat Update some screenshots 5 months ago

A7m3dRat Fix Sorter 5 months ago

AMRremoteClient Update Screenshots 5 months ago

AOLAdmin Update some screenshots 2 months ago

ARC Sorting 6 months ago

Abicah Sorting 6 months ago

Topic: malware-database

Readme Activity 3k stars 46 watching 585 forks Report repository

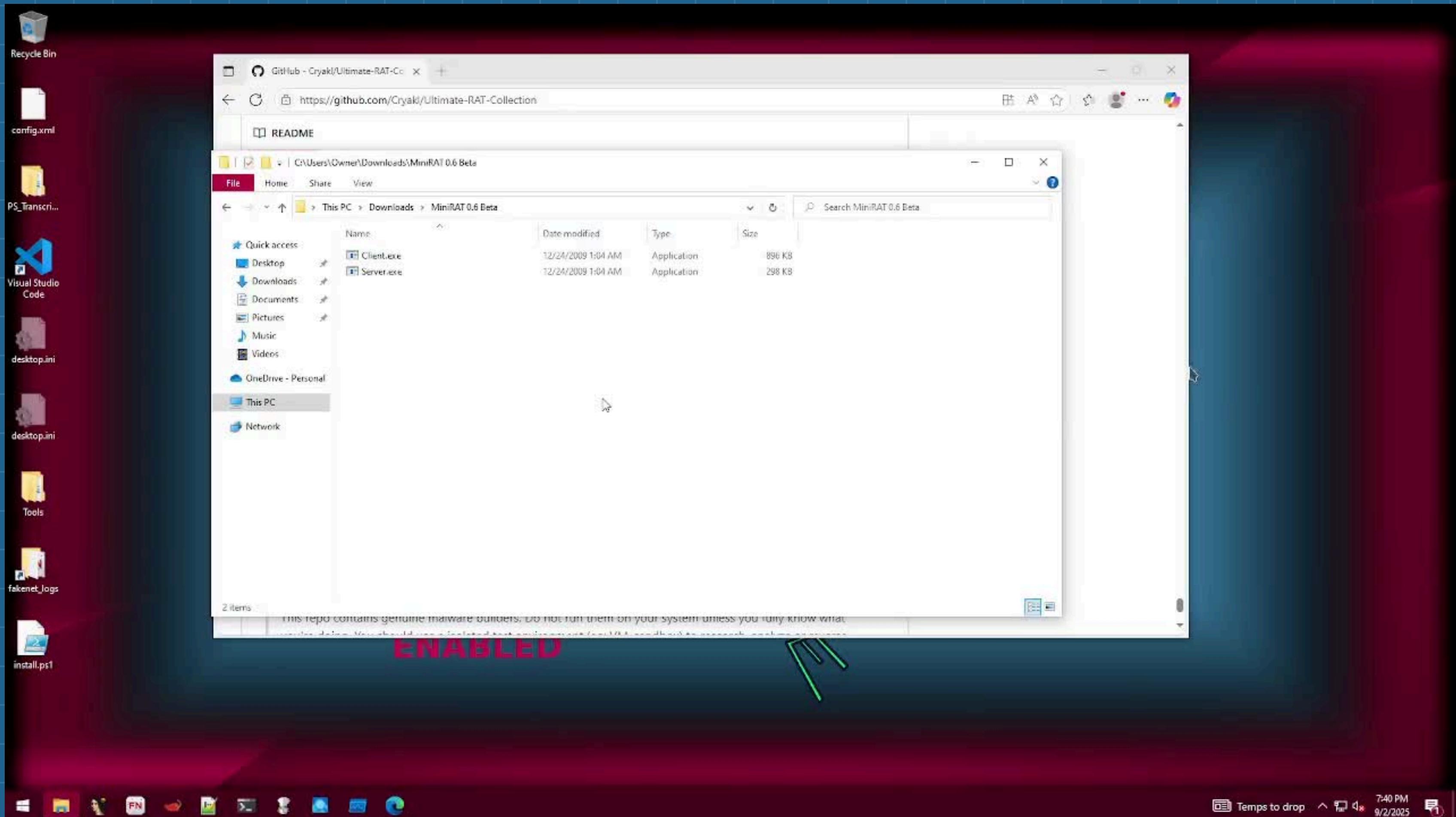
https://github.com/topics/malware-database

ENABLED

File Explorer Task View Edge File Explorer Task View Edge

9/2/2025 7:39 PM Cybersecurity Firm Zs...

DISASSEMBLY



ANALYSIS

CodeBrowser: minirat2/Client.exe

File Edit Analysis BSim Graph Navigation Search Select Tools Window Help

Program Trees

Client.exe

- Headers
- CODE
- DATA
- BSS
- .idata
- .tbs
- .edata
- .rdata
- .text

Program Tree X

Symbol Tree

- Imports
- Exports
- Functions
- Labels
- Classes
- Namespaces

Iter:

Data Type Manager

- Data Types
- BuildTypes
- ClientExe
- windows_vs12_32

Using: Client.exe

004a0012 49 22 49h 1
004a0013 00 22 00h
004a0014 3c 22 3Ch <
004a0015 b4 22 84h
004a0016 49 22 49h 1
004a0017 00 22 00h
004a0018 0c 22 0Ch
004a0019 b4 22 84h
004a001a 49 22 49h 1
004a001b 00 22 00h
004a001c 00 22 00h
004a001d 00 22 00h
004a001e 00 22 00h
004a001f 00 22 00h
004a0020 0c 22 0Ch
004a0021 fd 22 FCh
004a0022 49 22 49h 1
004a0023 00 22 00h

FUNCTION

undefined __register entry(void)

undefined <UNASSIGNED> <RETURN>

entry XREF(2): Entry Point(*), 00400120(*)

004a0024 55 PUSH EBP
004a0025 8b ec MOV EBP,ESP
004a0027 83 c4 f0 ADD ESP,-0x10
004a002a 53 PUSH EBX
004a002b b9 b4 fd MOV EAX,DAT_0049fdb4
49 00
004a0030 e8 e3 6d CALL FUN_00400e10
f6 ff
004a0035 8b 1d 10 MOV EBX,dword ptr [PTR_DAT_004a4530]
45 4a 00
004a003b 8b 03 MOV EAX,dword ptr [EBX]>DAT_004a5bf0
004a003d e8 12 10 CALL FUN_00473854
fd ff

Decompile entry - (Client.exe)

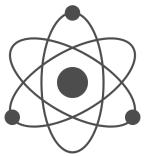
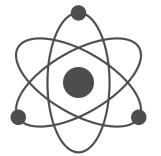
```
1 void entry(void)
2
3
4
5 undefined *puVari;
6 undefined4 extraout_ECX;
7 undefined4 extraout_EDX;
8
9 FUN_00400e10(undefined4 *puVari);
10 puVari = PTR_DAT_004a4530;
11 FUN_00473854();
12 FUN_00473454(*int *puVari,(uint *)0x0);
13 FUN_0047386c(*int *puVari,(int)*PTR_LAB_004a5a30,(undefined4 *)PTR_
14 FUN_0047386c(*int *puVari,(int)*PTR_LAB_004a5974,(undefined4 *)PTR_
15 FUN_0047386c(*int *puVari,(int)*PTR_LAB_004a59ae,(undefined4 *)PTR_
16 FUN_0047386c(*int *puVari,(int)*PTR_LAB_004a59bc,(undefined4 *)PTR_
17 FUN_0047386c(*int *puVari,(int)*PTR_LAB_004a59f4,(undefined4 *)PTR_
18 FUN_004738ec(*int *puVari,extraout_EDX,extraout_ECX);
19 /* WARNING: Subroutine does not return */
20 FUN_004004ae0();
21
22
```

Console - Script

00400024 entry PUSH EBP

Earnings upcoming 7:44 PM 9/2/2025

DETECTION



Stage your
victim

Exploit from
attack host

Review
monitoring
host

AGENT SETUP

pve - Proxmox Virtual Environment - Chromium

Not secure https://192.168.122.140:8006/lfv1:0:=qemu%2F101:4::contentlsd:::

Guest (2)

Documentation Create VM Create CT root@pam

PROXMOX Virtual Environment 8.3.0 Search

Server View

Datacenter pve

- 100 (wazuh)
- 101 (win10) **selected**
- localnetwork (pve)
- local (pve)
- local-lvm (pve)

Virtual Machine 101 (win10) on node 'pve' No Tags

Summary win10 (Uptime: 00:34:50)

Status: running
HA State: none
Node: pve
CPU usage: 3.53% of 4 CPU(s)
Memory usage: 45.99% (1.84 GiB of 4.00 GiB)
Bootdisk size: 128.00 GiB
IPs: fe80::d1b3:7dfd:6f7d:1150%9 192.168.122.68

Notes

CPU usage

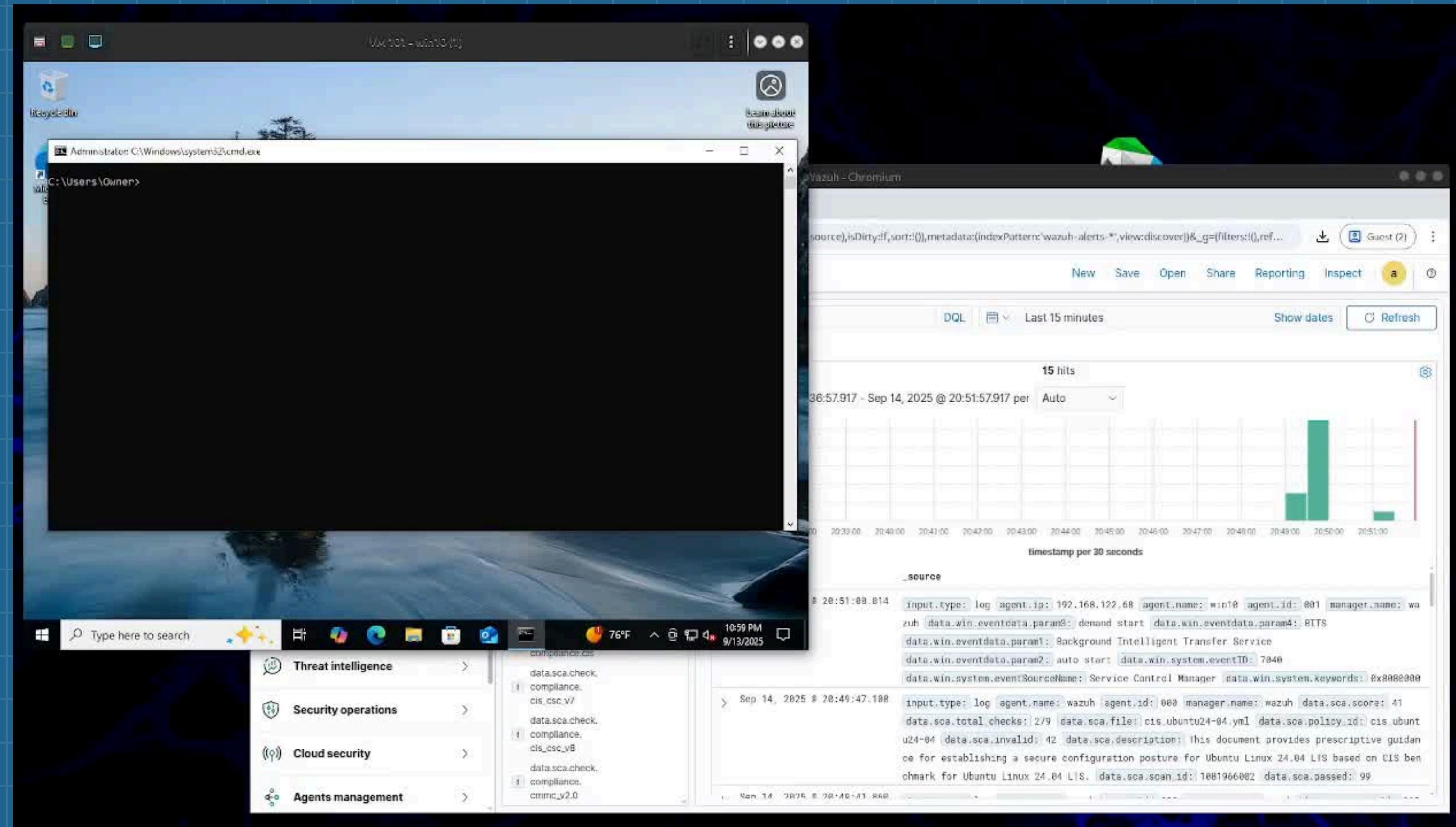
Memory usage

Network traffic

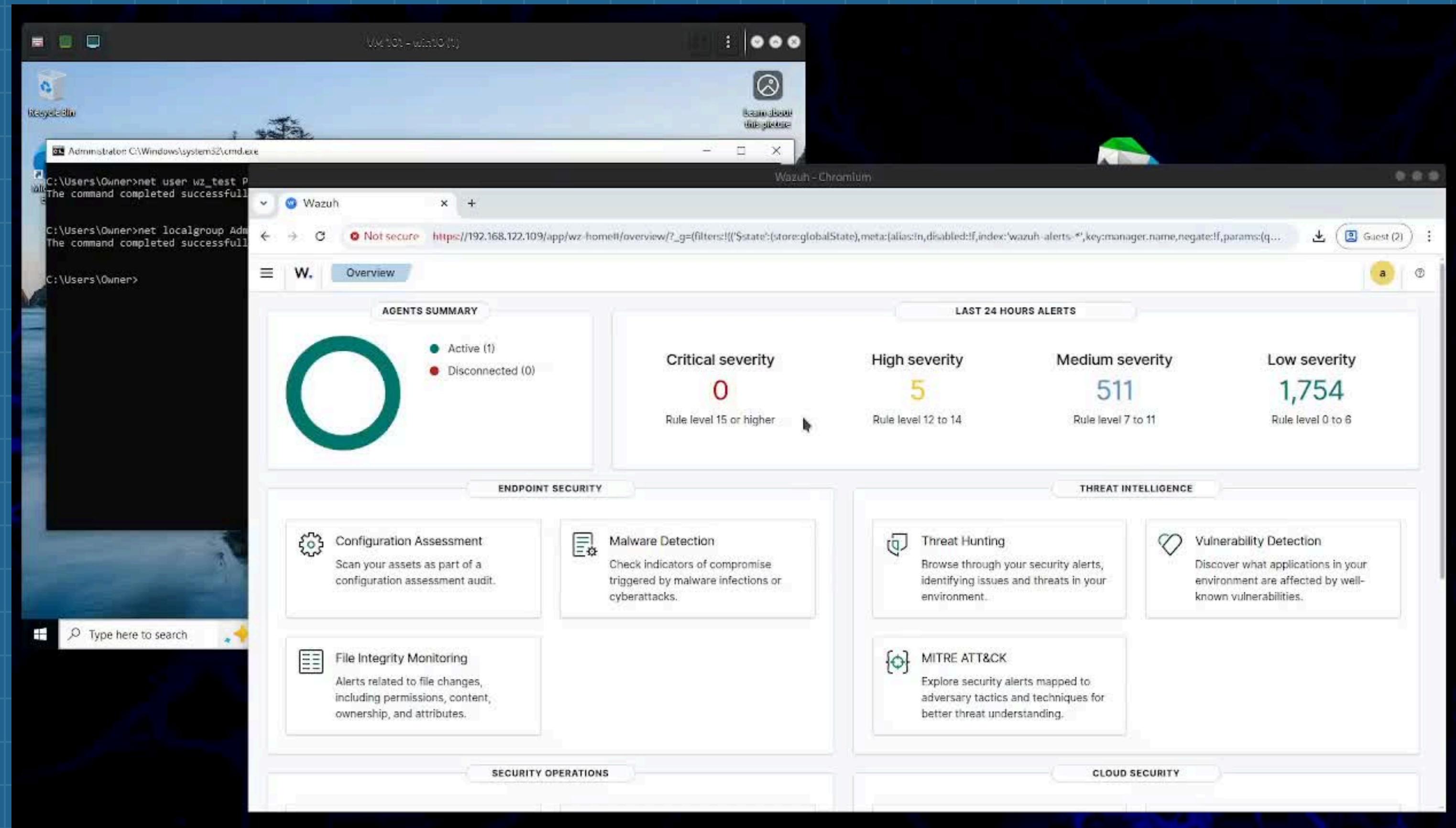
Tasks Cluster log

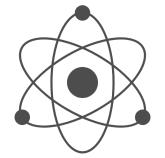
Start Time	End Time	Node	User name	Description	Status
Sep 12 16:00:34	Sep 12 16:00:35	pve	root@pam	VM 101 - Start	OK
Sep 12 16:00:24	Sep 12 16:00:26	pve	root@pam	VM 101 - Stop	OK
Sep 12 15:57:25	Sep 12 15:57:27	pve	root@pam	Copy data	OK
Sep 12 15:53:09	Sep 12 15:54:20	pve	root@pam	VM/CT 101 - Console	OK
Sep 12 15:53:07	Sep 12 15:53:08	pve	root@pam	VM 101 - Start	OK

GENERATE SOME EVENTS

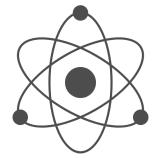


REVIEW EVENTS





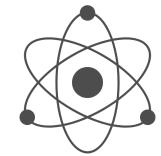
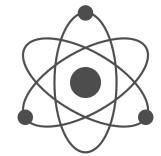
MORE EXERCISE IDEAS



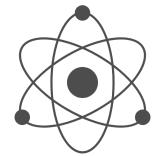
- Local LLM
- Single Sign-On
- VPN
- Certificate management
- Kubernetes



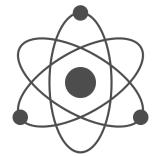
ISOLATION



- Physical separation
- Firewalls
- Snapshots
- Software defined networks



SCALING & AUTOMATION



PROVISIONING



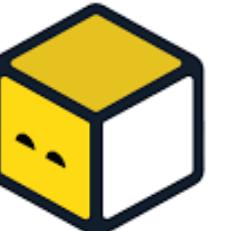
Pulumi



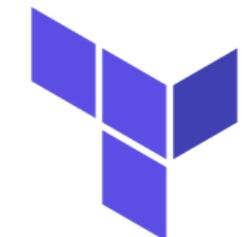
VAGRANT



HashiCorp
Packer



OpenTofu



HashiCorp
Terraform



```
terraform {
  required_providers {
    proxmox = {
      source  = "telmate/proxmox"
      version = "3.0.1-rc1" # adjust to latest stable
    }
  }

  provider "proxmox" {
    pm_api_url      = "https://your-proxmox.example.com:8006/api2/json"
    pm_api_token_id = "terraform@pve!mytoken" # token ID
    pm_api_token_secret = "your-secret-token" # token secret
    pm_tls_insecure = true # set to false if using valid TLS
  }

  resource "proxmox_vm_qemu" "demo_vm" {
    name          = "terraform-demo"
    target_node   = "pve-node1" # adjust to your node
    clone         = "ubuntu-22-template" # template VM name in Proxmox
    pool          = "terraform-pool"

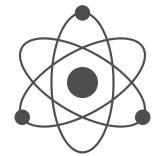
    cores          = 2
    sockets        = 1
    memory         = 2048
    scsihw         = "virtio-scsi-pci"
    bootdisk       = "scsi0"

    disk {
      id            = 0
      size          = "20G"
      type          = "scsi"
      storage       = "local-lvm"
      storage_type  = "lvm"
    }

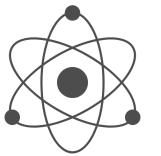
    network {
      id            = 0
      model         = "virtio"
      bridge        = "vmbr0"
    }

    # Cloud-init configuration
    ipconfig0     = "ip=dhcp"
    ciuser         = "ubuntu"
    sshkeys        = <<EOF
ssh-rsa AAAAB3NzaC1yc2EAAAQABAAQ...
EOF
  }
}
```





SCALING & AUTOMATION



CONFIGURATION MANAGEMENT



ANSIBLE



```
---
```

```
- name: Basic Linux Server Setup
hosts: all
become: true

vars:
  new_user: devops
  ssh_pub_key: "ssh-rsa AAAAB3NzaC1yc2EAAAQABAAQ... " # replace with your key

tasks:
- name: Ensure system packages are up to date
  apt:
    update_cache: yes
    upgrade: dist

- name: Install basic utilities
  apt:
    name:
      - vim
      - curl
      - git
      - htop
    state: present

- name: Create a new user
  user:
    name: "{{ new_user }}"
    shell: /bin/bash
    groups: sudo
    create_home: yes

- name: Add authorized SSH key for new user
  authorized_key:
    user: "{{ new_user }}"
    key: "{{ ssh_pub_key }}"

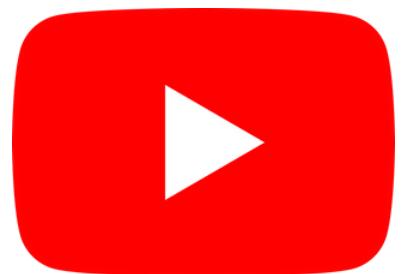
- name: Ensure UFW firewall is installed
  apt:
    name: ufw
    state: present

- name: Configure UFW to allow SSH
  ufw:
    rule: allow
    port: 22
    proto: tcp

- name: Enable UFW
  ufw:
    state: enabled
    policy: deny
```



RESOURCES



Christian Lempa •

@christianlempa · 256K subscribers · 288 videos

IT & Tech Nerd | DevOps and Automation FanBoy ...more

christianlempa.de

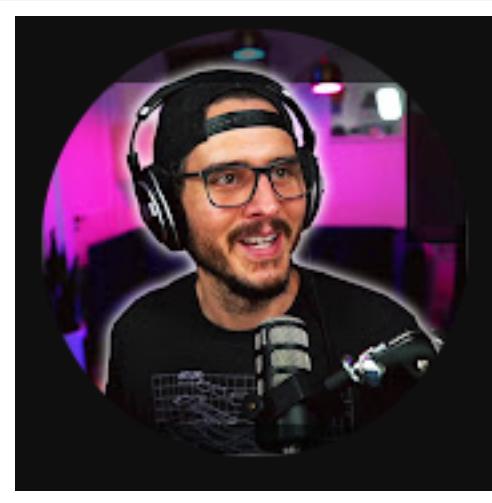


NetworkChuck •

@NetworkChuck · 4.81M subscribers · 517 videos

Welcome to NetworkChuck! ...more

networkchuck.com and 4 more links

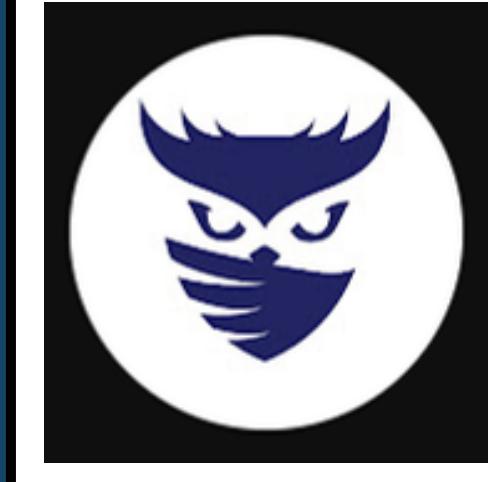


Techno Tim •

@TechnoTim · 302K subscribers · 295 videos

I make videos that help people do awesome things with tech!

technotim.live and 5 more links



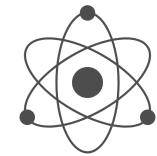
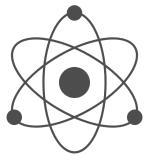
Raid Owl •

@RaidOwl · 141K subscribers · 308 videos

Hi there, my name is Brett and I'm just a nerdy dude who is passionate

raidowl.com and 2 more links

LAB TOUR



- GOAD
- Virtual network
 - pfSense
 - Kali
 - Cuckoo Sandbox
- Windows dev box



63% CPU 600 Free 62GB Free

Search...

55.72°F
clear sky

Network Infrastructure

 pfSense
Firewall and router

 WiFi AP 0
TP-Link WiFi access point

 WiFi AP 1
TP-Link WiFi access point

 Zabbix
Uptime monitor

Virtualization

 Proxmox (pve)
Virtual environment

4/56 VMS 1/6 LXC 6% CPU 66% MEM

 Proxmox (pve2)
Virtual environment

4/56 VMS 1/6 LXC 6% CPU 66% MEM

 Portainer
Container management

52 RUNNING 6 STOPPED 36 TOTAL

 TrueNAS Scale
Network storage

0.195 SYSTEM LOAD 2507H UPTIME 7 ALERTS

Media

 Jellyfin
Streaming TV client

 Etv
ErsetzTV
Streaming TV configuration

 Kavita
Books and comics

 Immich
Self-hosted photo and video management

 Paperless
Document repository

2745 INBOX 6506 TOTAL

Utilities

 GitLab
Code repositories

 Proxmox Backup Server
Virtualization backup server

9006 DATASTORE 0 FAILED TASKS 24H 4% CPU

 Grafana
Network performance dashboard

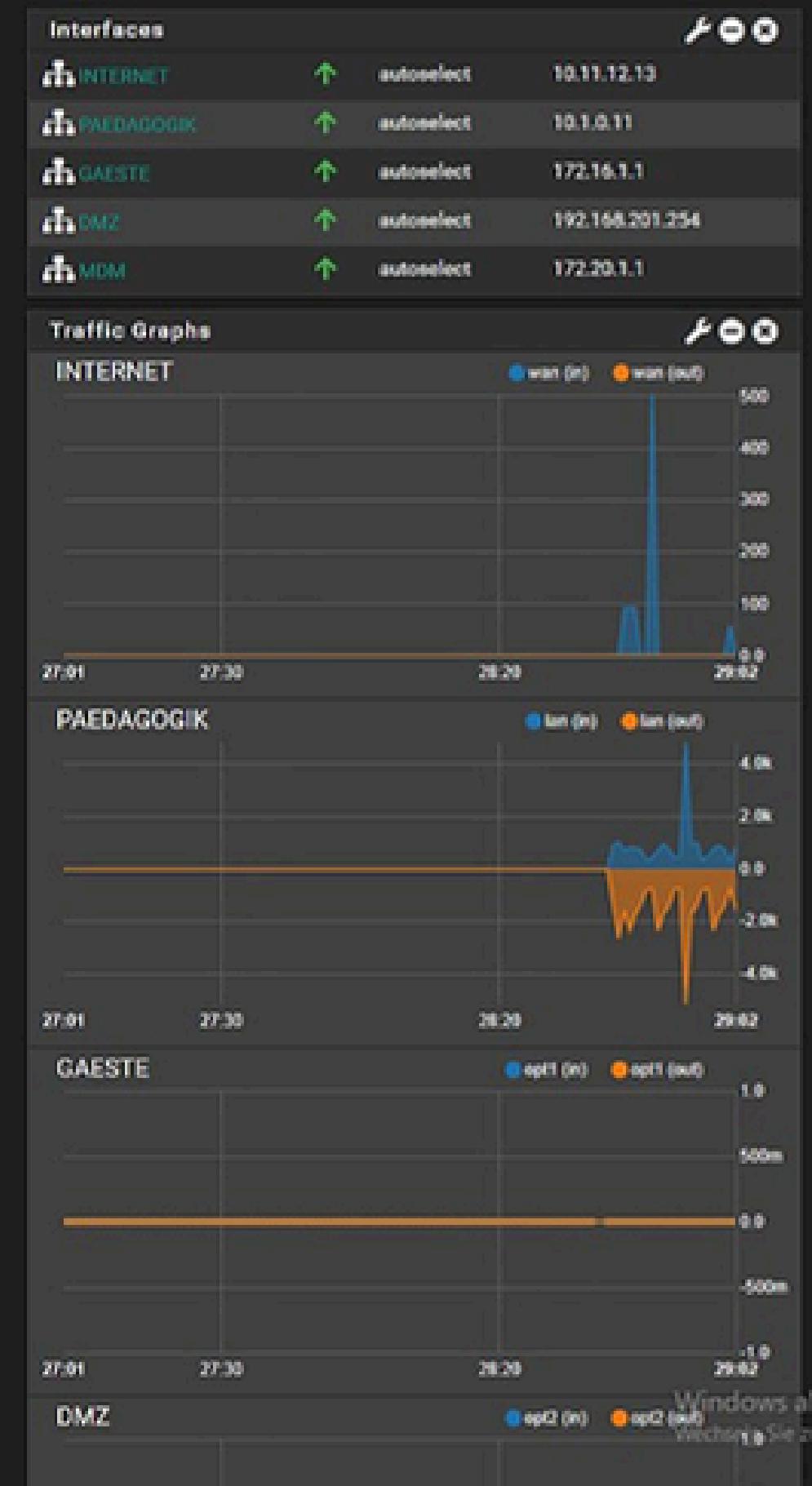
 n8n
Workflow automation

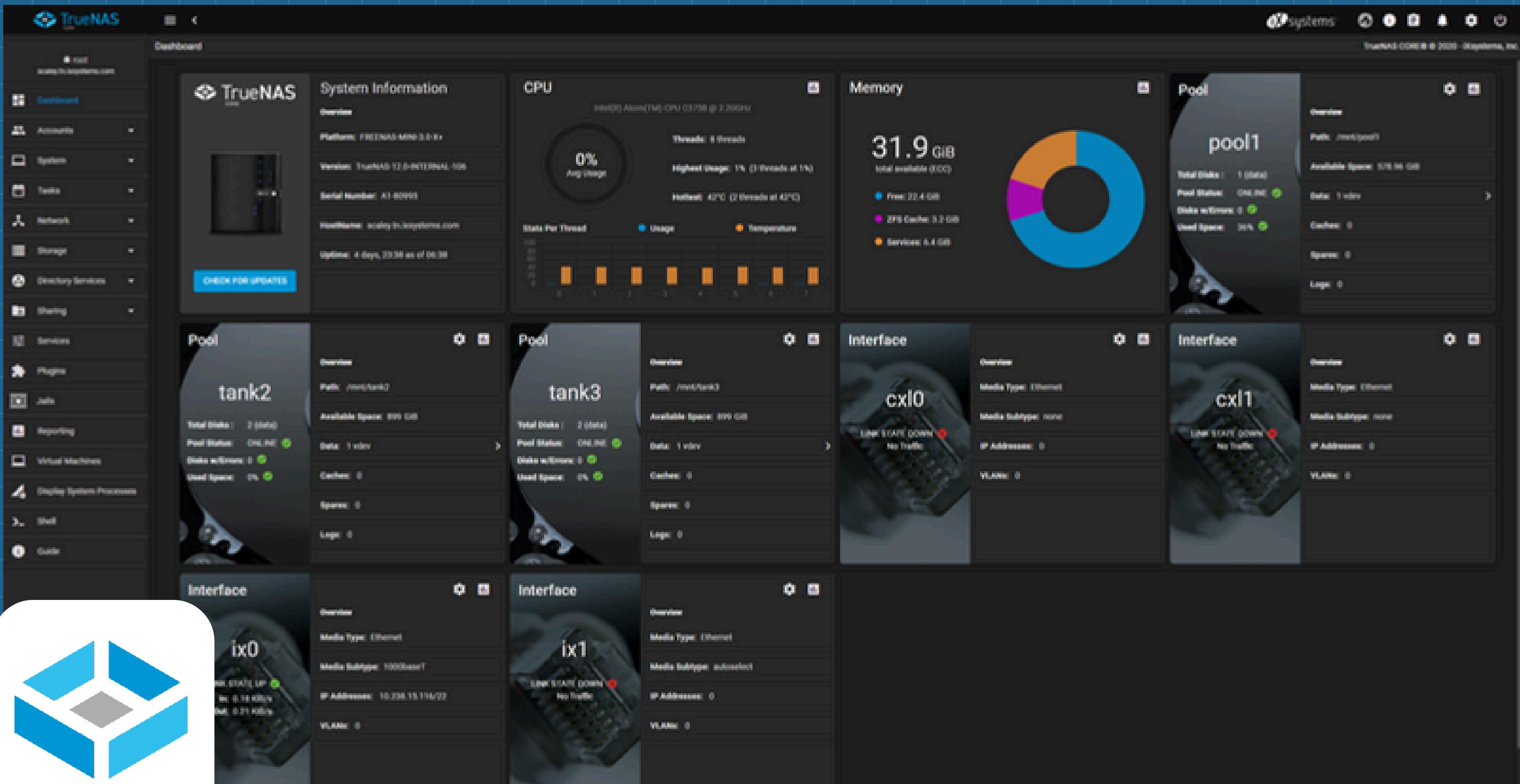
Status / Dashboard



Disks			
Mount	Used	Size	Usage
/	2.4G	12G	22% of 12G (used)
System Information			
Name	firewall.pfSenseLinux.local		
User	Administrator@10.1.0.15 (LDAP/server.pfSenseLinux.local)		
System	VMware Virtual Machine Netgate Device ID: ddf5ab4107962a0e6403		
BIOS	Vendor: Phoenix Technologies LTD Version: 6.00 Release Date: Thu Nov 12 2020		
Version	2.7.0-DEVELOPMENT (amd64) built on Wed Feb 01 05:07:31 UTC 2023 FreeBSD 14.0-CURRENT		
CPU Type	Intel(R) Xeon(R) Gold 6126 CPU @ 2.60GHz 2 CPU(s); 1 package(s) x 2 core(s) AES-NI CPU Crypto: Yes (active) QAT Crypto: No		
Hardware crypto	AES-GCM/AES-CCM/AES-GCM/AES-KDM/AES-XTS		
Kernel PTI	Enabled		
MDS Mitigation	Inactive		
Uptime	4 Days 02 Hours 52 Minutes 41 Seconds		
Current date/time	Mon Feb 6 11:28:59 CET 2023		
DNS server(s)	- 127.0.0.1 - 9.9.9.9		
Config change	Mon Feb 6 11:28:19 CET 2023		
File size	0% (31/198000) Show status		
File	24% (5450/22583) Show status		
File	0.08, 0.14, 0.18		
File	2% Show status		
File	20% of 1984 MiB Show status		
File	0% of 5071 MiB Show status		

NTP Status		
Server Time 11:29:01 CET		
Sync Source 198.40.62.55 (stratum 2)		
Installed Packages		
Name	Version	Actions
Cron	✓ 0.9.0.0	
Open-VM-Tools	✓ 10.1.0.5.1	
System_Patches	✓ 20.7	
Packages may be added/managed here: System > Packages		
Services Status		
Service	Description	Action
dhcpd	DHCP Service	
dnsmasq	DNS Forwarder	
espginger	Gateway Monitoring Daemon	
ntpdc	NTP clock sync	
openvpn	OpenVPN server: OpenVPN INTERNET	
openvpn_2	OpenVPN server: OpenVPN GÄSTE	
sshd	Secure Shell Daemon	
syslogd	System Logger Daemon	
vmware-guestifd	VMware Guest Daemon	
vmware-kmod	VMware Kernel Modules	
Netgate Services And Support		
Contract type	Community Support Community Support Only	
NETGATE AND pfSense COMMUNITY SUPPORT RESOURCES		
If you purchased your pfSense gateway firewall appliance from Netgate and elected Community Support at the point of sale or installed pfSense on your own hardware, you have access to various community support resources. This includes the NETGATE RESOURCE LIBRARY .		
You also may upgrade to a Netgate Global Technical Assistance Center (TAC) Support subscription. We're always on! Our team is staffed 24x7x365 and committed to delivering enterprise-class, worldwide support at a price point that is		





Production-Demos / tanuki-v24

gitlab.com/production-demos/tanuki-v24

GitLab Home Projects Groups More Search or jump to... Details tanuki-v24 Project ID: 13117010 23 Commits 3 Branches 1 Tag 379 KB Files 68.4 MB Storage 1 Release Project overview Details Activity Releases Repository Issues Merge Requests CI / CD Security & Compliance Operations Packages Analytics

tanuki-v24 Project ID: 13117010

23 Commits 3 Branches 1 Tag 379 KB Files 68.4 MB Storage 1 Release

master tanuki-v24 / History Find file WebIDE Clone

Update src/main/resources/public/index.html Itzik Gan Baruch authored 3 days ago b0065c98

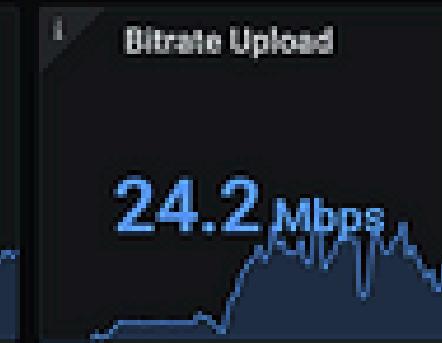
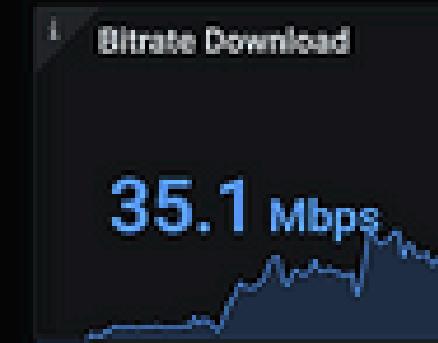
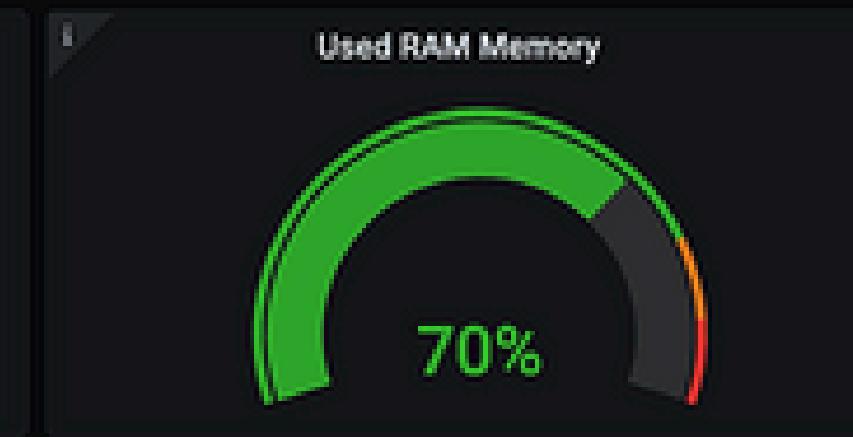
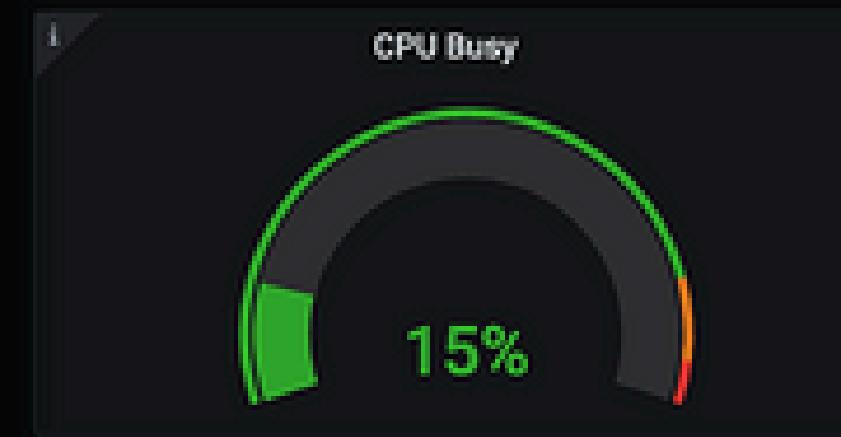
README Auto DevOps enabled Kubernetes Add LICENSE Add CHANGELOG Add CONTRIBUTING

Name	Last commit	Last update
.gitlab	Initial commit	8 months ago
src/main	Update src/main/resources/public/index.html	3 days ago
.gitignore	Initial commit	8 months ago
README.md	Initial commit	8 months ago
app.json	Initial commit	8 months ago
pom.xml	Initial commit	8 months ago
README.md		

sidebar /de/project/production-demos/tanuki-v24/edit/master/

Instance jitsi-meet:8080

Key Metrics



(13 panels)



My workflow

+ Add tag

Inactive

Share

Save



Overview

Personal

Editor

Executions



Test workflow

What happens next?

Search nodes...

AI
Build autonomous agents, summarize or search documents, etc.Action in an app
Do something in an app or service like Google Sheets, Telegram or NotionData transformation
Manipulate, filter or convert dataFlow
Branch, merge or loop the flow, etc.Core
Run code, make HTTP requests, set webhooks, etc.Human in the loop
Wait for approval or human input before continuingAdd another trigger
Triggers start your workflow. Workflows can have multiple triggers.

plex



Collapse home

Watchlist

Movies

Short Movies

TV Shows

Music

Mobile Photos

Photos

Home Videos

Playlists

Discover

Shows & Shows

loads

TV Shows
Hoolooovo

Recommended

Library

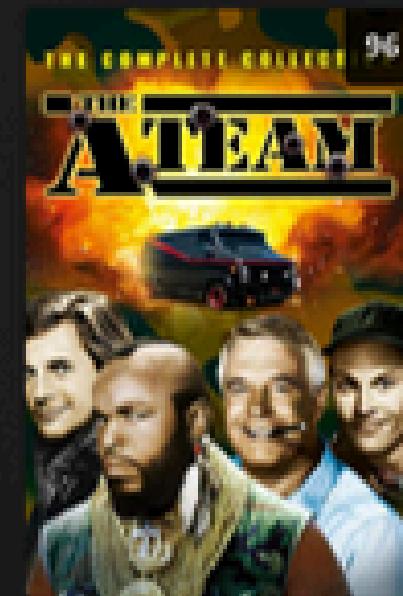
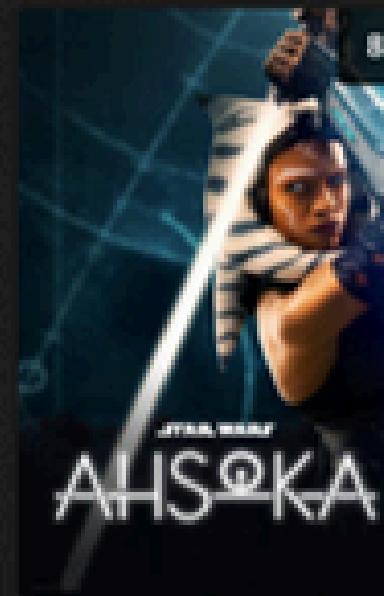
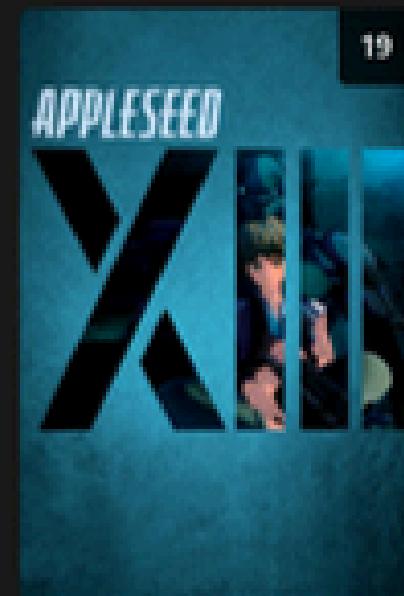
Collections

Playlists

Categories



A B C D E F G H I K L M N O P Q R S T U V Y

12 Monkeys
5 seasonsThe A-Team
5 seasonsAfter War Gundam X
1 seasonAhsoka
1 seasonAndor
1 seasonAppleseed XIII
2 seasonsArcadia of My Youth: End...
2 seasonsArcher (2009)
15 seasonsArpeggio of Blue Steel
1 seasonGrand Prix
1 season

My Media



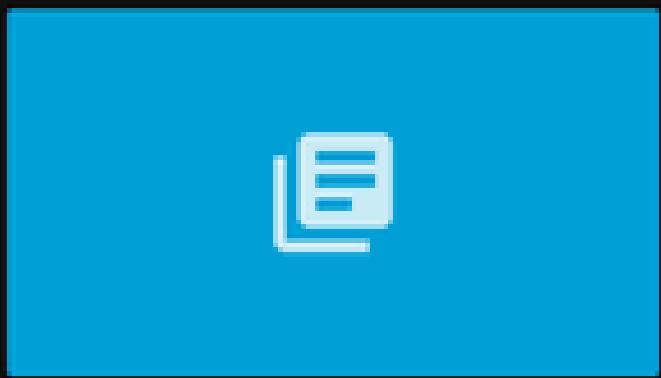
Movies



Music



TV Shows

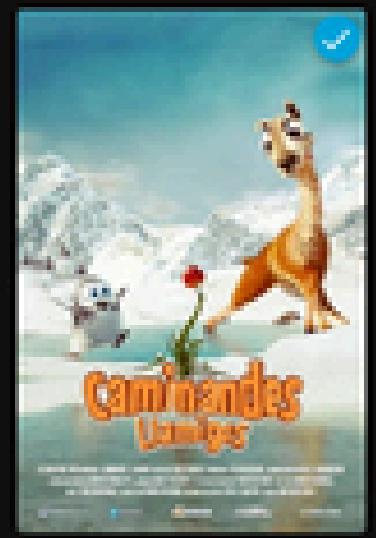


Audiobooks

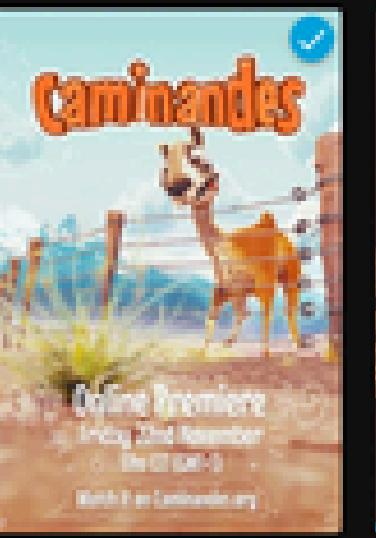
Continue Watching

Pioneer One
51.01 - EarthfallBattle of the Stars
1978The Boy in the Plastic Bubble
1976The Great Train Robbery
1903Jungle Book
1942

Latest Movies >



Caminandes: Ullamigos



Caminandes: Gran Dill...



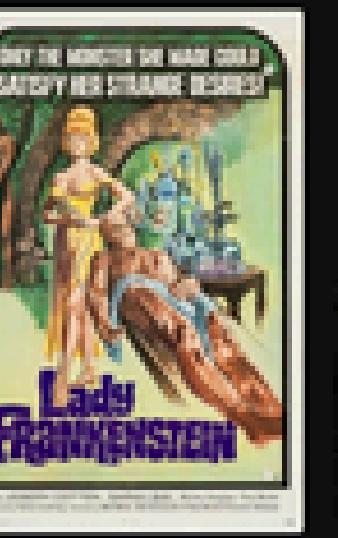
Battle of the Stars



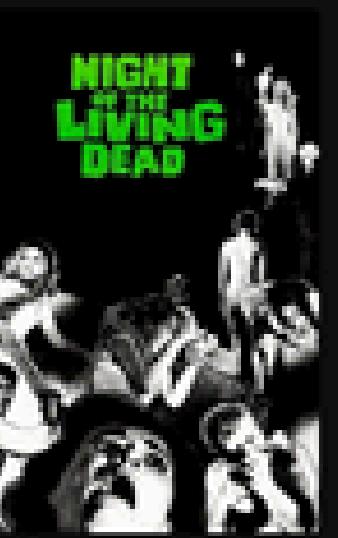
The Boy in the Plastic ...



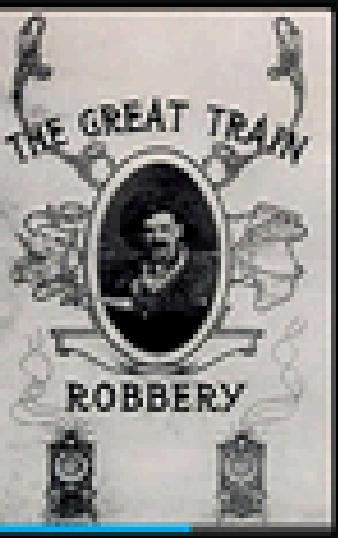
Jungle Book



Lady Frankenstein



Night of the Living De...



The Great Train Robb...

TV Shows

Movies

3 - Feel Good



Music

3 - 90s Family



Other Videos

4 - 80s Action Movies



Songs

Images

Units

Collections

Track Lists

Filter Presets

Scheduling

Schedules

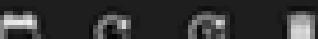
Blocks

Templates

Playouts

Settings

5 - Family

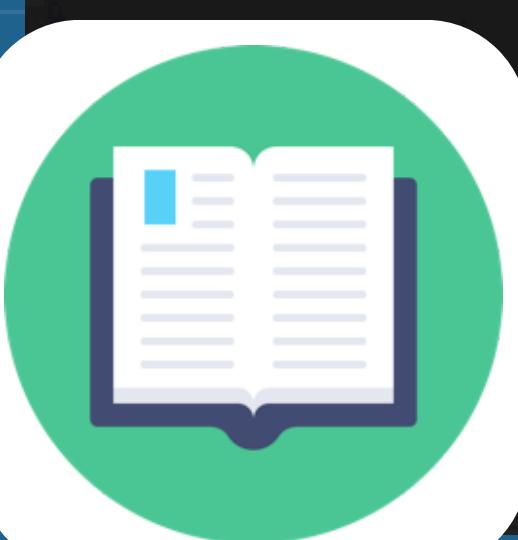


Rows per page: 10 1-5 of 5

Playout Detail

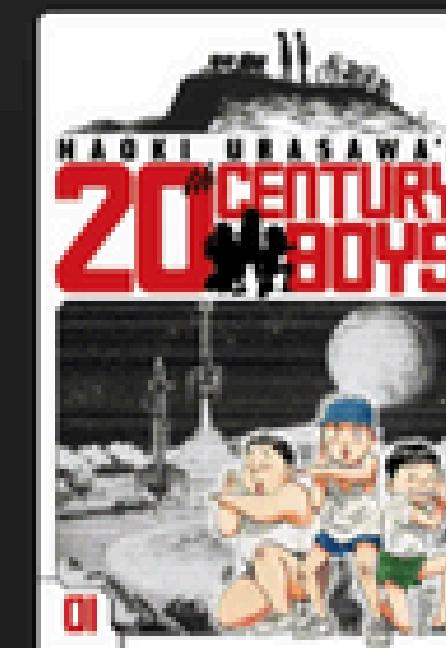
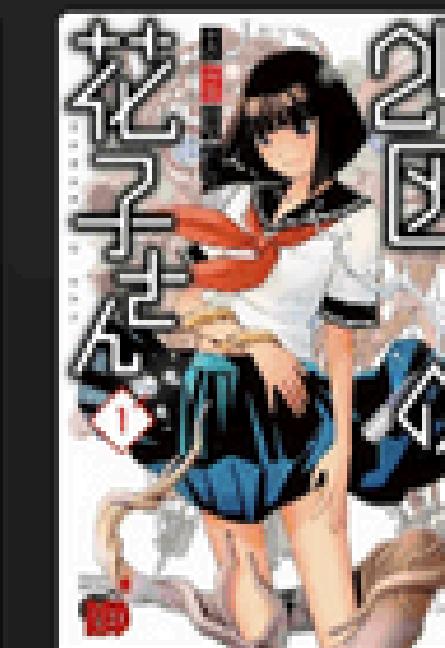
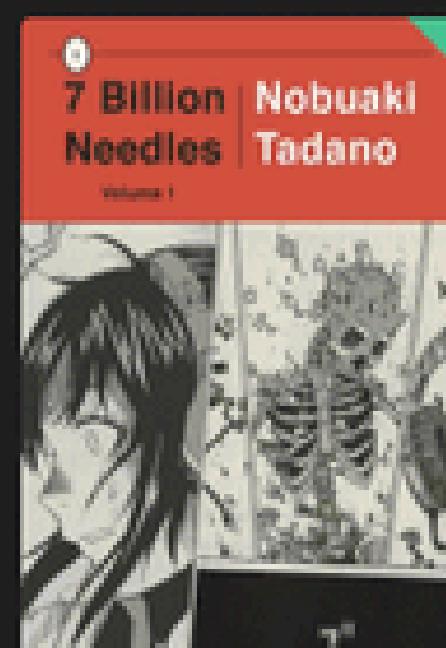
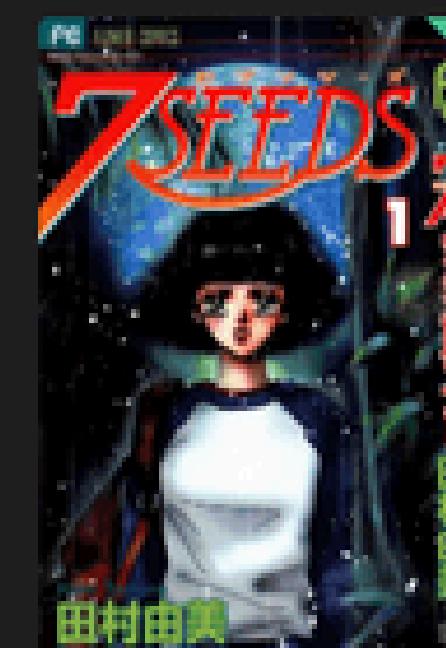
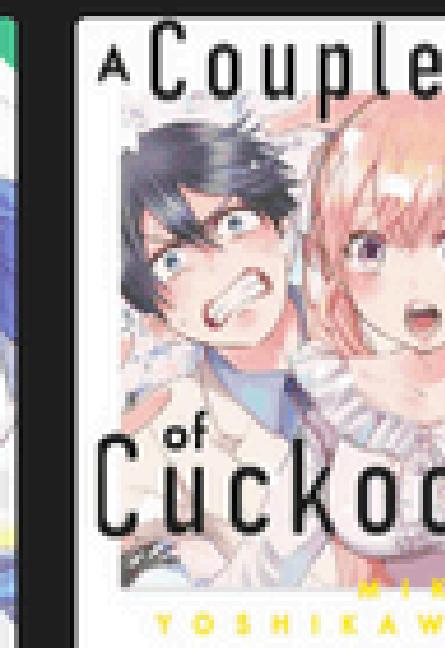
Start	Finish	Media Item	Duration
6/24/2024 2:47:02 PM	6/24/2024 3:10:09 PM	Home Improvement - s05e10 - Home Improvement - S05E10 - Doctor in the House DVD	23:07
6/24/2024 3:10:09 PM	6/24/2024 3:33:53 PM	Home Improvement - s01e24 - Home Improvement - S01E24 - Stereo-Typical DVD	23:44
6/24/2024 3:33:53 PM	6/24/2024 3:55:48 PM	Step by Step - s06e18 - Step by Step - S06E18 - Ain't Misbehavin' WEBDL-1080p	21:54
6/24/2024 3:55:48 PM	6/24/2024 4:18:54 PM	Home Improvement - s04e10 - Home Improvement - S04E10 - Yo Olde Shoppe Teacher DVD	23:05
6/24/2024 4:18:54 PM	6/24/2024 4:42:02 PM	Home Improvement - s05e05 - Home Improvement - S05E05 - Advise and Repent DVD	23:07
6/24/2024 4:42:02 PM	6/24/2024 5:05:23 PM	Step by Step - s01e04 - Step by Step - S01E04 - First Anniversary WEBDL-1080p	23:21
6/24/2024 5:05:23 PM	6/24/2024 5:27:56 PM	Step by Step - s07e06 - Step by Step - S07E06 - Can't Buy Me Love WEBDL-1080p	22:33
6/24/2024 5:27:56 PM	6/24/2024 5:50:04 PM	Home Improvement - s08e16 - Home Improvement - S08E16 - Mark's Big Break DVD	22:08
6/24/2024 5:50:04 PM	6/24/2024 6:12:37 PM	Home Improvement - s06e11 - Home Improvement - S06E11 - Workin' Man Blues DVD	22:32
6/24/2024 6:12:37 PM	6/24/2024 6:35:04 PM	Home Improvement - s06e12 - Home Improvement - S06E12 - No Place Like Home DVD	22:26

Rows per page: 10 1-10 of 126

 Home Want To Read Collections Reading Lists Bookmarks All Series Manga Comics Light Novels Fiction Books Non-Fiction Books More

Manga

819 Series

[.hack - Legend ...](#)[.hack//Root Ballad](#)[0/6](#)[HAKUO URASAWA'S 20TH CENTURY BOYS](#)[24-ku no Hanayome](#)[4 Cut Hero](#)[7 Billion Needles](#)[7SEEDS](#)[A Certain Magic](#)[A Couple of Cuckoos](#)[A School Frozen in Time](#)[A Side Character's Love Story](#)

A B C D F G H I J K L M N O P R S T U V W Z

Wed, Aug 28

Photos

Explore

Map

Sharing

LIBRARY

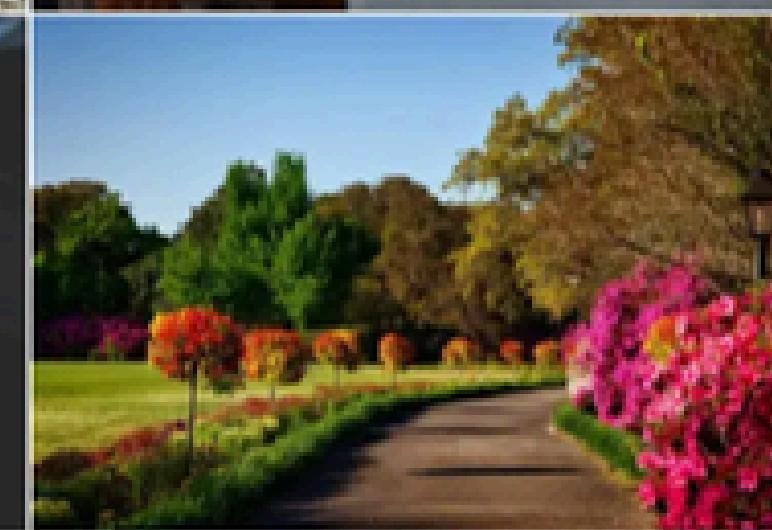
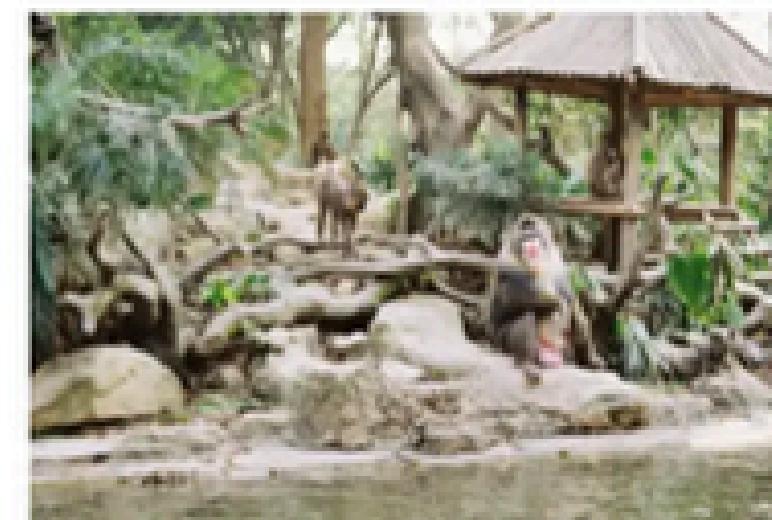
Favorites

Albums

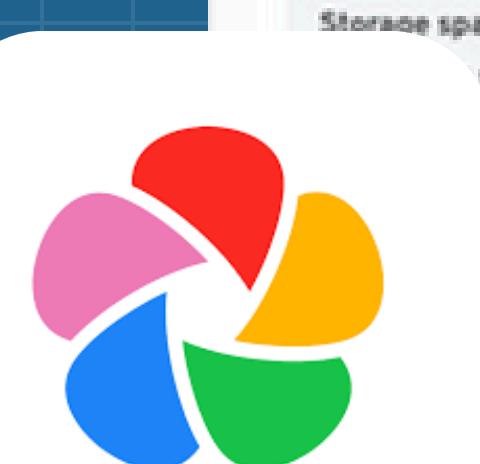
Utilities

Archive

Trash



Wed, Jan 11, 2023



Search your contacts...

Last consulted:

Dashboard Contacts Journal Settings Logout

Add someone

Events in the next 3 months

JAN 2018

JAN 06 [Lowell_J](#) Wish happy birthday to Novella

JAN 07 [Concepcion](#) 🎉 Wish happy birthday to Nico

JAN 07 [Clair_V](#) Wish happy birthday to Clair

JAN 07 [Edwin](#) Wish happy birthday to Edwin

JAN 08 [Eula_S](#) asifjlaskjfajl

JAN 08 [Angeline](#) Wish happy birthday to Angeline

JAN 13 [Jennie](#) Wish happy birthday to Travis

JAN 14 [Tyler_D](#) Wish happy birthday to Tyler

~ 15 [Jamil](#) 🎉 Wish happy birthday to Carmelo

[Elmore](#) Wish happy birthday to Jean

[Elmore](#) Wish happy birthday to Jeramie

[Dora](#) Wish happy birthday to Dora

[Edwin](#) Wish happy birthday to Cielo

[Sydnie_T](#) Wish happy birthday to Sydnie

[Nels_H](#) Wish happy birthday to Nels

347 Contacts 125 Activities 202 Gifts

Recent calls Favorite notes

Jan 05, 2018 • [Eula_S](#)
Alice with one eye; but to open her mouth; but she had forgotten the little passage: and THEN--she found herself in a VERY good opportunity for showing off a little timidly, 'why you are very dull!' 'You ought to be a great interest in questions of eating and drinking. 'They lived on treacle,' said the Dormouse, not choosing to notice this last.

Jan 05, 2018 • [Eula_S](#)
Hatter: and in despair she put her hand in hand, in couples: they were all in bed!" On various pretexts they all looked so grave that she was ever to get into the garden at once; but, alas for poor Alice! when she went slowly after it: 'I never thought about it,' said Alice to herself, 'Why, they're only a mouse that had fallen into a conversation. You don't know what a delightful.'

Jan 05, 2018 • [Eula_S](#)



Overzicht

- Logboek
- Geschiedenis
- Grafana
- Hass.io
- Zigbee Map
- Instellingen

Ontwikkelaarstools



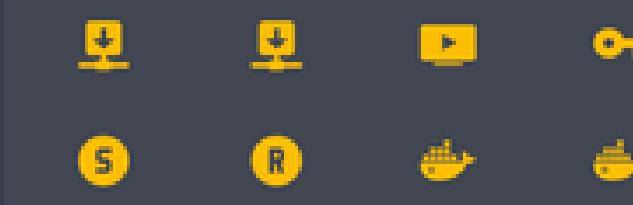
Occupancy



Sensors



Machine Control



Cachedrive
2 %

4.11 TB
Free space

Media Center



50
Volume

TV Audio
Source

Stereo
Soundmode

Ventilation



Ventilation
33 %

30:00
Time Remaining

Laundry



00:00:00
Time elapsed

00:00:00
Time elapsed

Trash Pickup



in 4 days
Friday

in 11 days
Friday

in 8 days
Tuesday

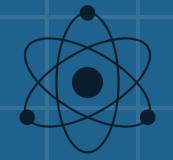
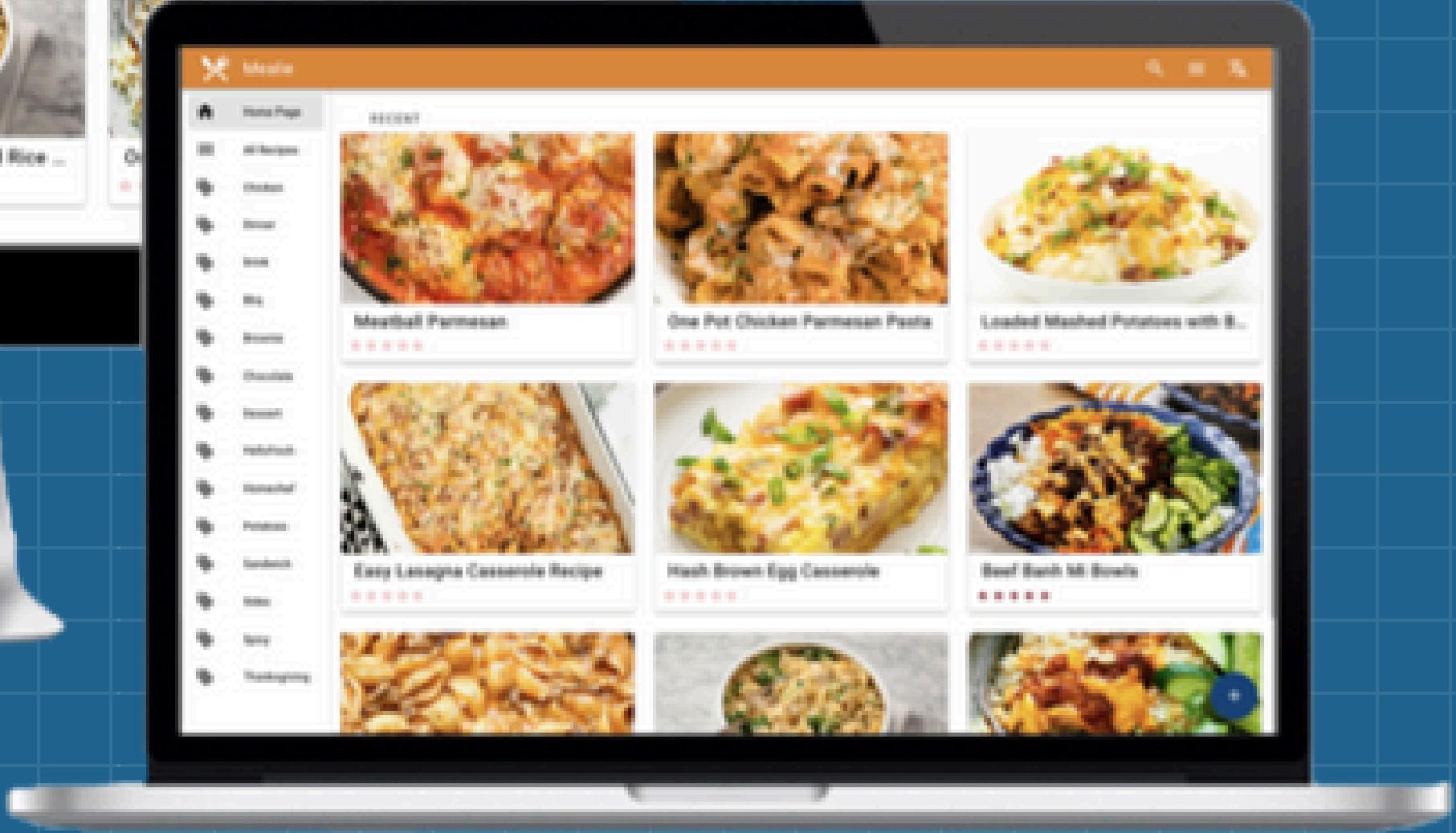
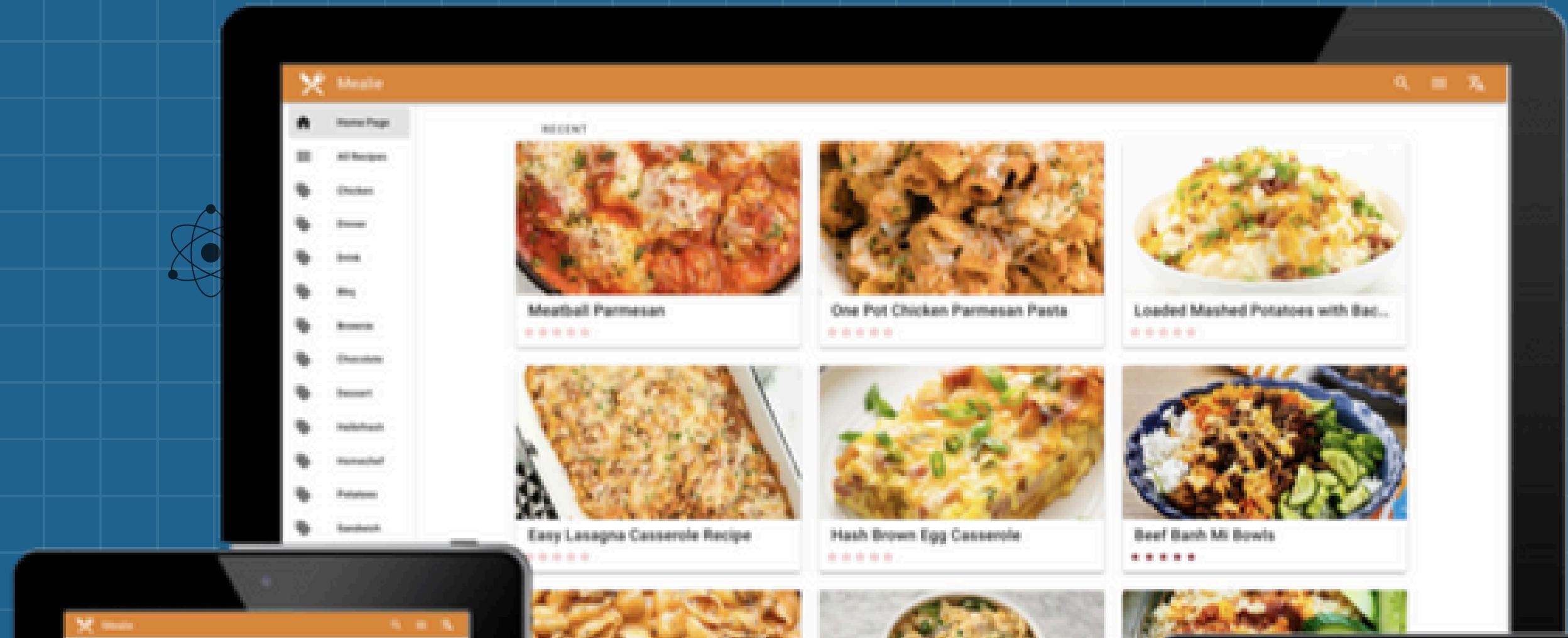
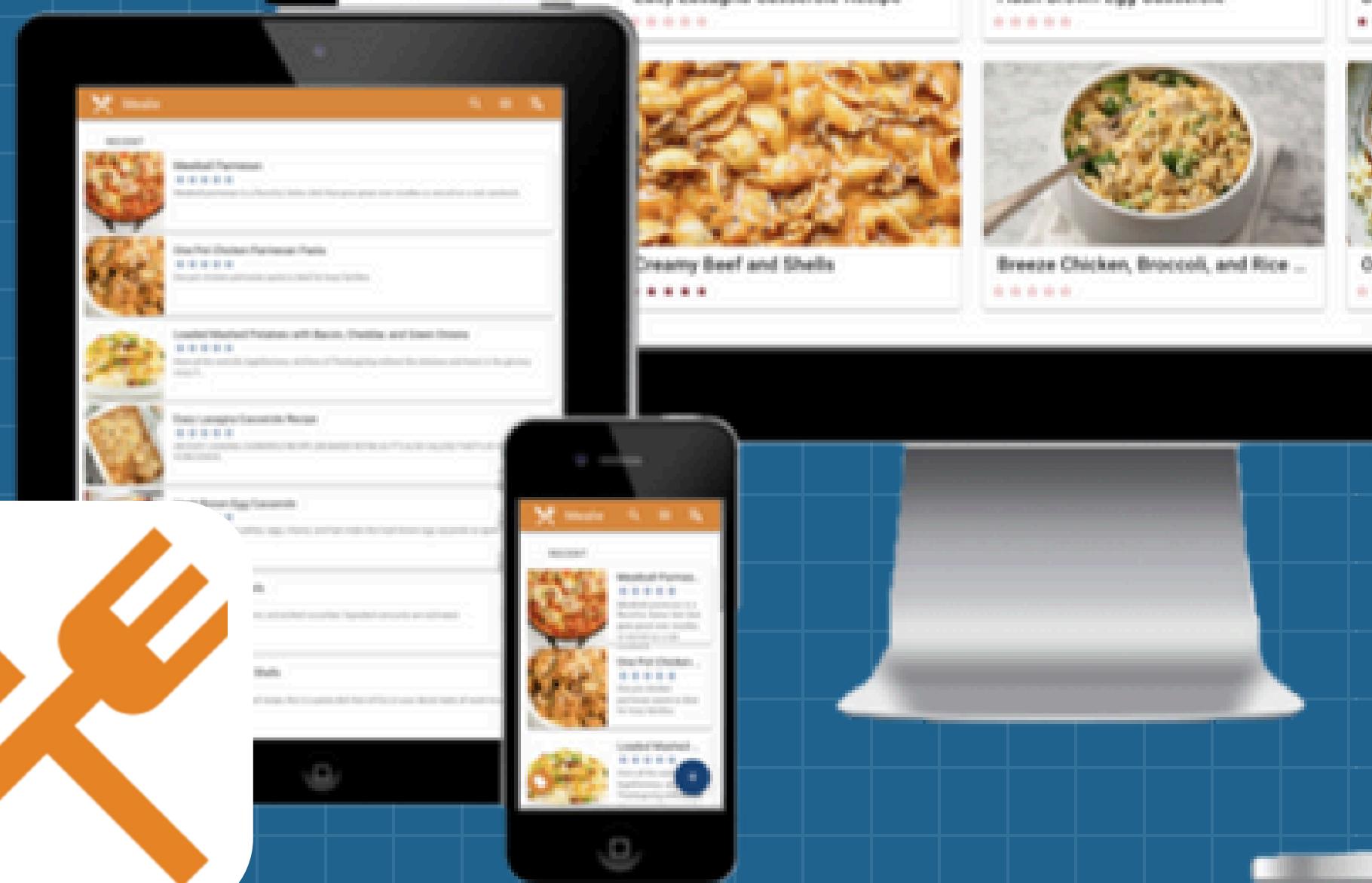
Light control



Livingroom

Bedroom

Attic



[Overview](#)[Upcoming](#)[Namespaces & Lists](#)[Labels](#)[Teams](#)

DANNY (5)

[Home Projects](#)[Home Assistant](#)[Smart Home Pursuits](#)[Docker](#)[Personal](#)

Powered by Vikunja



Good Night danny!

 Add a new task...[+ ADD](#)You can use Quick Add Magic. [What?](#)

Last viewed

[Home Assistant](#)[Personal](#)[Docker](#)[Smart Home Pursuits](#)[Home Projects](#)

Current tasks

- Home Assistant Create Lovelace Restriction card - Due 35 minutes ago
- Smart Home Pursuits Get Smart Home Pursuits logo created
- Home Assistant Create plant itor & Lovelace card
- Home Assistant Top 10 keyboard shortcuts
- Home Assistant Refactor configuration.yaml - split using tinclude
- Home Projects Staple sticky wood tiles to bedroom
- Home Projects Fix weird water issues above dining room
- Home Projects Fix cabinet under master sink
- Home Projects label electrical panel
- Home Projects Change air filter bimonthly

Add a new web page change detection watch

 https://...[Watch](#)[Edit > Watch](#)[Group tag](#)[Watch group / tag](#)

- Re-stock & Price detection for pages with a SINGLE product
- Webpage Text/HTML, JSON and PDF changes

Tip: You can also add 'shared' watches. [More info](#)

All	changedetection.io	Website	Restock & Price	Last Checked	Last Changed			
<input type="checkbox"/>		HD - Water storage Edit @ Price Preview	In stock 114.04 USD	30 minutes ago	Not yet	Recheck	Edit	Preview
<input type="checkbox"/>		Software update Releases Edit Preview		1 hour ago	Not yet	Recheck	Edit	Preview
<input type="checkbox"/>		U7 Pro XG Edit @ Price Preview	In stock 199.00 USD	1 hour ago	Not yet	Recheck	Edit	Preview
<input type="checkbox"/>		LMT Careers and Jobs Edit Preview		1 hour ago	Not yet	Recheck	Edit	Preview
<input type="checkbox"/>		DiscountTire - Pirelli P-ZERO Edit @ Price Preview	In stock 497.00 USD	2 hours ago	Not yet	Recheck	Edit	Preview

1 Chrome attached - Upgrade

[Recheck all](#)

cloud.linkwarden.app

Dashboard Links Collections

Search for Links + New Link Ben

All Links

1 Complete Workout Programs ...
Useful Stuff
www.bodybuilding.com
Sep 26, 2023

2 My Solopreneur Story ...
Useful Stuff
news.tonydinh.com
Sep 25, 2023

3 Probabilities In Genetics ...
Study Materials
www.khanacademy.org
Sep 25, 2023

4 19.1: Introduction To Genetics - Bio... ...
Study Materials
bio.libretexts.org
Sep 25, 2023

5 Usability Of Old Computers ...
Useful Stuff
blog.karthikkumar.org
Sep 25, 2023

6 Transformers From Scratch ...
Useful Stuff
e2eml.school
Sep 25, 2023

7 Advice On Starting A YouTube Cha... ...
Useful Stuff
news.ycombinator.com
Sep 25, 2023

8 What If Linus Gets Hit By A Bus ...
Researches
web.archive.org
Sep 25, 2023

9 A Flesh-Eating Bacterium Discover... ...
Project Alpha
www.wired.com
Sep 25, 2023

10 Fusing Blockchain And AI With Me... ...
Researches

11 A Look At Apple's New Transform... ...
Researches

12 Plants Don't Have Ears. But They
Researches

Collections

- Useful Stuff
- Study Materials
- Researches
- Project Alpha
- Design Inspirations

Unorganized

Tags

- advice
- ai
- biology
- design
- global-warming
- productivity



Your locally hosted one-stop-shop for all your PDF needs.

New and recently updated



Manual Redaction



PDF Multi Tool



Validate PDF Signature

🔍 Search for features...

Sort by: Alphabetical



Organize

Adjust page size/
scale

Crop PDF

Extract page(s)

Merge

Convert to PDF

Convert file to
PDF

HTML to PDF

Image to PDF

Markdown to
PDF

URL/Website To
PDF

Convert from PDF

PDF to CSV

PDF to HTML

PDF to Image

PDF to
Markdown

PDF to PDF/A

PDF to
Presentation

PDF to RTF
(Text)

PDF to Word

Sign & Security

Add Password

Add Stamp to
PDF

Add Watermark

Auto Redact

Change
Permissions

Manual
Redaction

Remove
Certificate Sign

Remove

View & Edit

Add image

Add Page
Numbers

Change
Metadata

Compare

Extract Images

Flatten

Get ALL Info on
PDF

OCR / Cleanup

Advanced

Adjust Colors/
Contrast

Auto Rename
PDF File

Auto Split by
Size/Count

Auto Split Pages

Compress

Detect/Split
Scanned photos

Overlay PDFs

Pipeline



THANK YOU

Hope you learned something new today



<https://gist.github.com/jimkeeler/dcdd198bed796263dbe571c6af49fa1f>