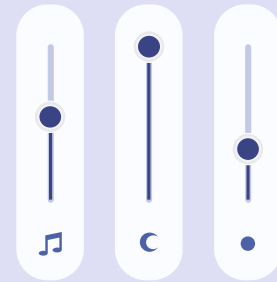




# Création d'une infrastructure virtualisée



Fait par Lucas, Michaël, Arnaud et Ilyas

Proxmox





# Objectif de notre projet

**Deux extraterrestres** nous ont assignés un brief avec toutes ces modalités afin de nous laisser en vie:

Un Pfsense :

- Wan (votre Vlan initial)
- LAN (a définir)
- VLAN 10 administratif ( GLPI, Le DNS, la console d'administration)
- VLAN 20 production (serveur web contenant le site des fierté Valenciennoise).

Le DNS doit être sur une machine Windows Serveur.

Le GLPI, la console et le serveur web devront être réalisés à partir d'un template.

Chaque machine une fois fonctionnelle devra posséder un cliché instantané.

Le DNS, GLPI, le serveur Web, le firewall seront monitorés sur Grafana / Prometheus.

Chaque machine linux aura son portail webmin.

Le DNS saura résoudre les noms des serveurs GLPI, du Serveur Web et de la console

Un script d'exploitation (avec menu) sera créé sur chaque machine pour réaliser les arrêts / démarrages des services les plus utilisés sur les machines respectives.

Les connexions SSH depuis votre VLAN initial seront configurées pour accéder à la console.

La console aura une connexion SSH par clé sur chaque machine.

Votre site web devra être accessible aussi depuis votre VLAN initial.



## PROXMOX



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# SOMMAIRE

01



02



03



Console administrateur

04

DNS /  / 

( SSH, Script, Webmin)

05

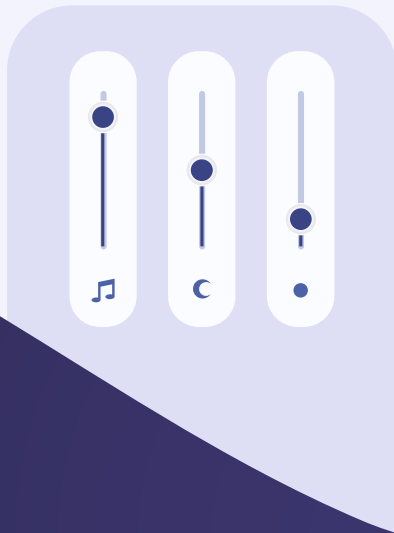
Prometheus /  
Grafana

( Node exporter)



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01

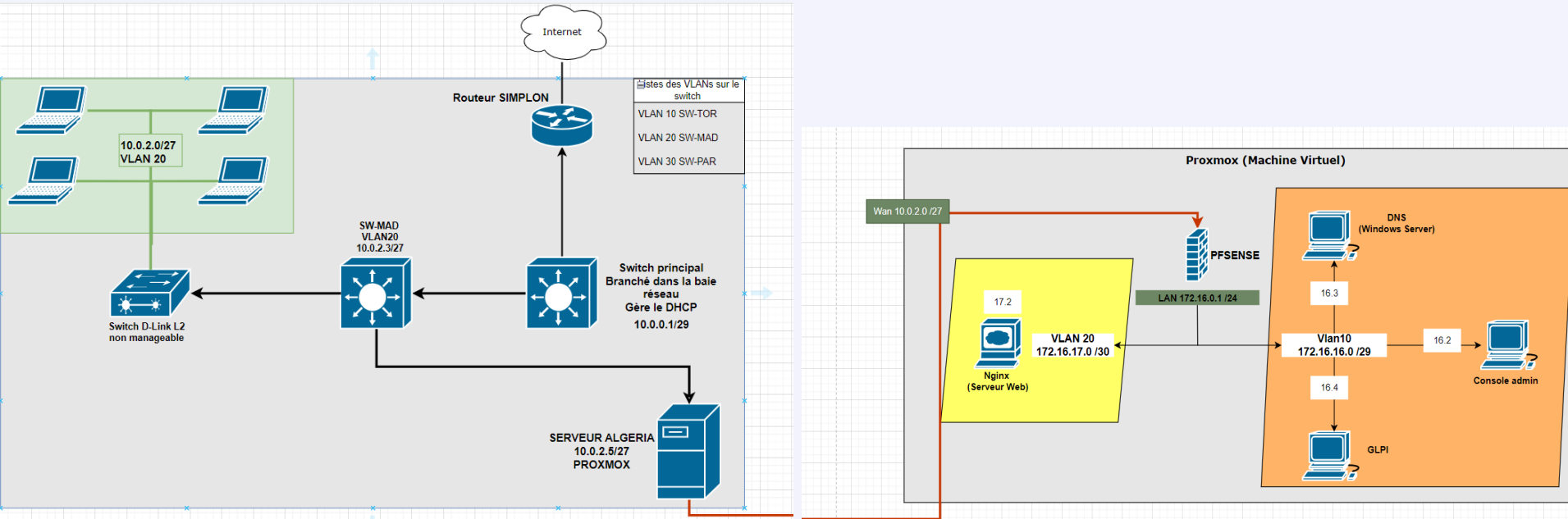
# Installation de Proxmox

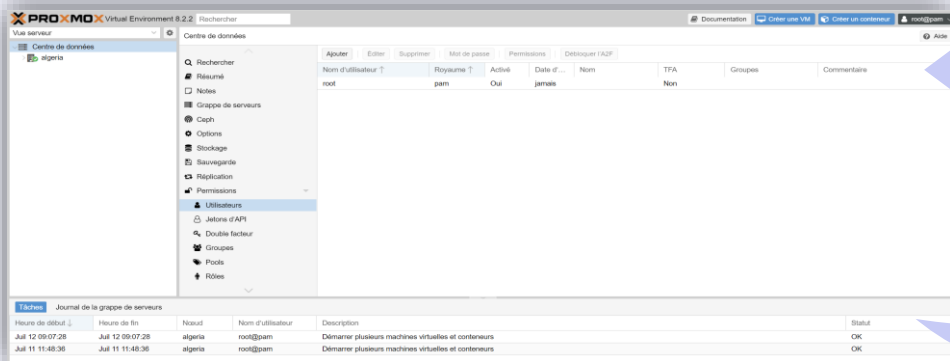
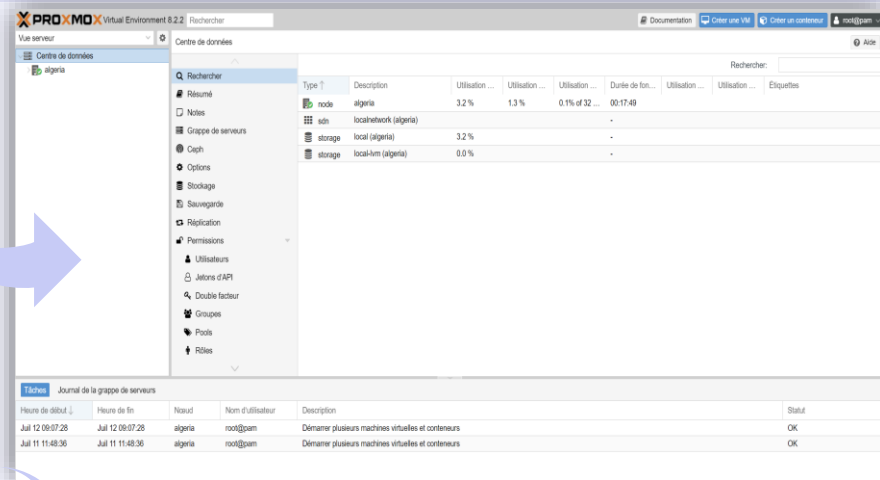
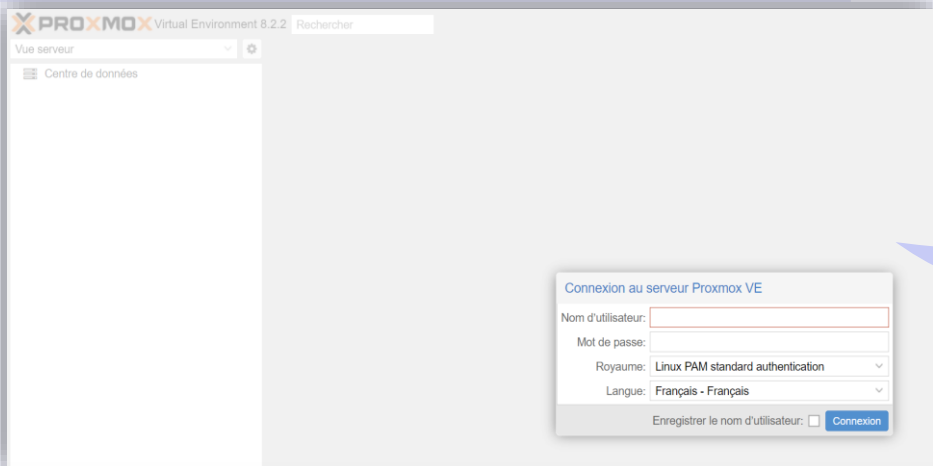
Hyperviseur de type 1

Proxmox



# Schéma de l'infrastructure





### Ajouter: Utilisateur

Nom d'utilisateur:  Prénom:

Royaume:

Groupe:

Date d'expiration:

Activé: ☒

Commentaire:

Avancé ☐ Ajouter

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```
root@algeria:~# adduser Non
adduser: Please enter a username matching the regular expression
configured via the NAME_REGEX configuration variable. Use the
'--allow-bad-names' option to relax this check or reconfigure
NAME_REGEX in configuration.
root@algeria:~# adduser Non --allow-bad-names
Allowing use of questionable username.
Adding user `Non' ...
Adding new group `Non' (1001) ...
Adding new user `Non' (1001) with group `Non (1001)' ...
Creating home directory `/home/Non' ...
Copying files from `/etc/skel' ...
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for Non
Enter the new value, or press ENTER for the default
    Full Name []: Arnaud
```

## Proxmox VE Login

User name: Non

Password: .....

Realm: Linux PAM standard authentication

Language: English - English

Save User name: ☐

Login

**PROXMOX** Virtual Environment 8.2.2

Documentation Créer une VM Créer un conteneur Jesaispas@pam

Vue serveur

Centre de données

- algeria
  - localnetwork (algeria)
  - local (algeria)
  - local-vm (algeria)

Stockage 'local' sur le nœud 'algeria'

Résumé Téléverser Télécharger depuis l'URL Supprimer

Sauvegardes

Images ISO

Modèles de conteneurs

Permissions

Rechercher: Nom, format

Nom	Date	Format	Taille
Debian12.iso	2024-07-12 10:43:01	iso	681.65 Mo
fr-fr_windows_server_2022_x64_dvd_9f7d1adb.iso	2024-07-12 10:46:20	iso	5.57 Go
ptSense-CE-2.6.0-RELEASE-amd64.iso	2024-07-12 10:46:52	iso	767.46 Mo
ubuntu-22.04.4-desktop-amd64.iso	2024-07-12 10:49:07	iso	5.02 Go



Download:





# 02

## PF SENSE



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# Création de VLAN sur *pf sense*

```
You can now access the webConfigurator by opening the following URL in your web browser:
https://172.16.17.1/

Press <ENTER> to continue.
KVM Guest - Netgate Device ID: b2bb951e33474117350d

*** Welcome to pfSense 2.7.2-RELEASE (amd64) on pfSense ***

WAN (wan)      -> vtnet0      -> v4/DHCP4: 10.0.2.25/27
LAN (lan)      -> vtnet1      -> v4: 172.16.0.1/24
OPT1 (opt1)    -> vtnet1.10  -> v4: 172.16.16.1/29
OPT2 (opt2)    -> vtnet1.20  -> v4: 172.16.17.1/30

0) Logout (SSH only)          9) pfTop
1) Assign Interfaces          10) Filter Logs
2) Set interface(s) IP address 11) Restart webConfigurator
3) Reset webConfigurator password 12) PHP shell + pfSense tools
4) Reset to factory defaults  13) Update from console
5) Reboot system              14) Enable Secure Shell (sshd)
6) Halt system                15) Restore recent configuration
7) Ping host                  16) Restart PHP-FPM
8) Shell
```

Firewall / Rules / OPT1

Floating WAN LAN **OPT1** OPT2

Rules (Drag to Change Order)

States	Protocol	Source	Port	Destination	Port	Gateway	Queue	Schedule	Description	Actions
<input checked="" type="checkbox"/>	✓	10/59.36 MiB	IPv4 *	OPT1 subnets	*	*	*	*	none	<a href="#">Add</a> <a href="#">Delete</a> <a href="#">Toggle</a> <a href="#">Copy</a> <a href="#">Save</a> <a href="#">Separator</a>

Firewall / Rules / OPT2

Floating WAN LAN OPT1 **OPT2**

Rules (Drag to Change Order)

States	Protocol	Source	Port	Destination	Port	Gateway	Queue	Schedule	Description	Actions
<input checked="" type="checkbox"/>	✓	0/402 KiB	IPv4 *	OPT2 subnets	*	*	*	*	none	<a href="#">Add</a> <a href="#">Delete</a> <a href="#">Toggle</a> <a href="#">Copy</a> <a href="#">Save</a> <a href="#">Separator</a>



Download:





ubuntu®

03

# Console administrateur

Proxmox

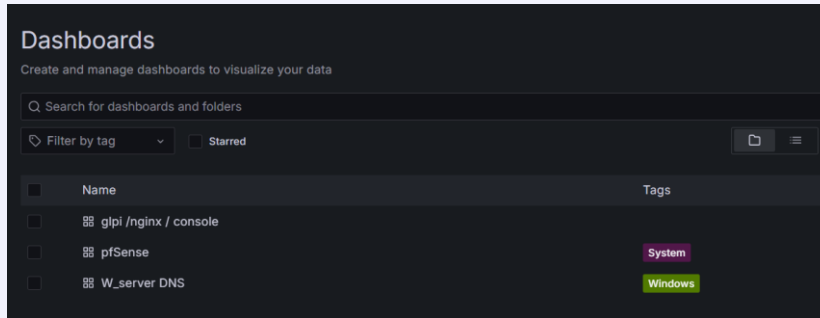




# Rôle de la console admin

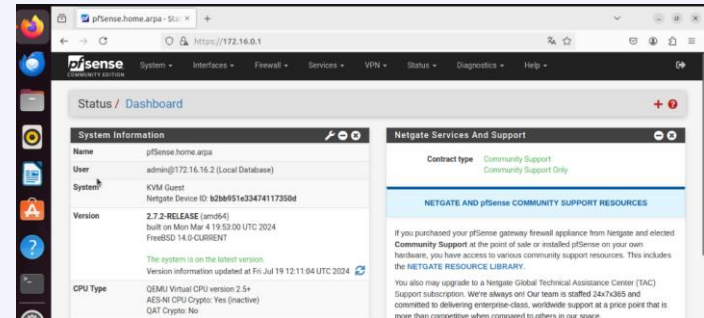
## Prometheus / Grafana

Notre console d'administration servira à collecter les données des autres machines pour permettre la supervision



## Interface graphique

La console sera la seule machine de l'infrastructure à disposer d'une interface graphique et donc d'un navigateur web qui nous permettra de manager les différents serveur via webmin ou de pouvoir paramétrer le firewall pf sense



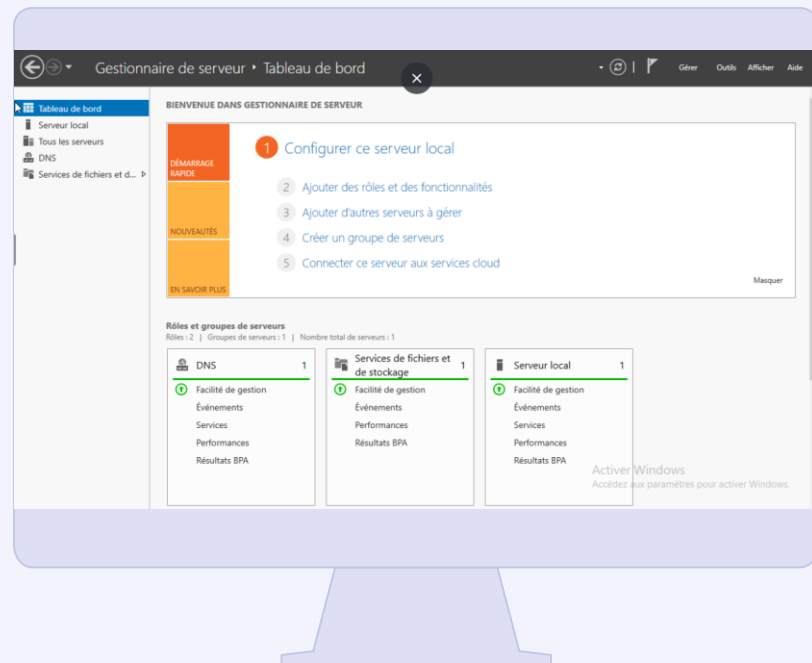
Download:





# DNS/GLPI/NGINX

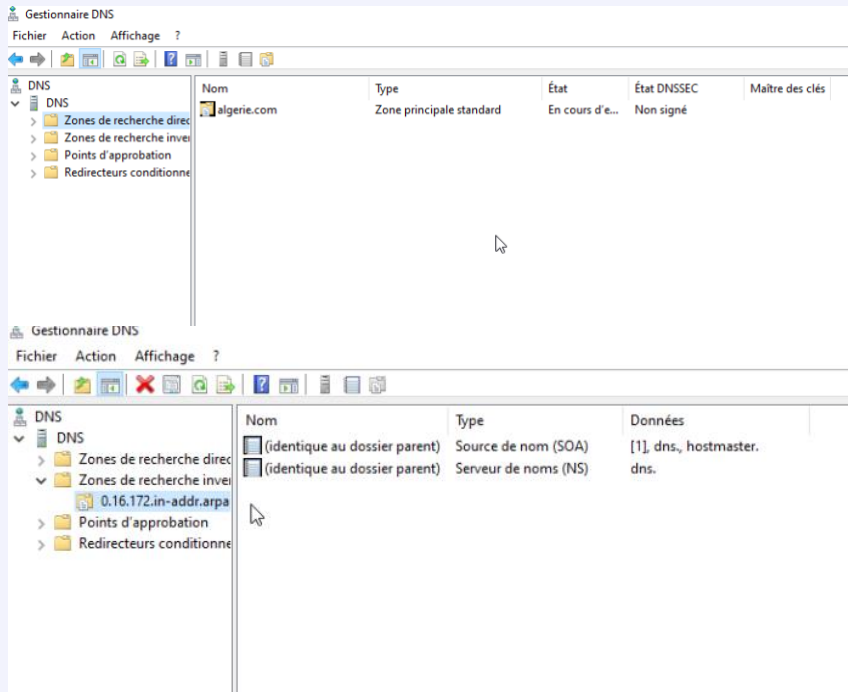
## 04



Download:



# Configuration du DNS



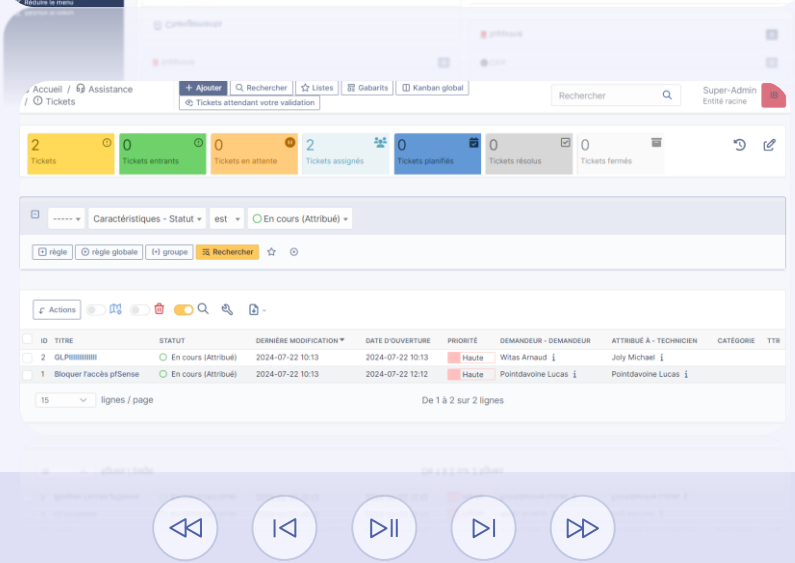
## Traduction d'adresse sur notre console

```
peutetre@flfou:~$ ping google.com
PING google.com (172.217.20.174) 56(84) bytes of data:
64 bytes from par10s49-in-f14.1e100.net (172.217.20.174): icmp_seq=1 ttl=117 time=4.92 ms
64 bytes from waw02s07-in-f14.1e100.net (172.217.20.174): icmp_seq=2 ttl=117 time=4.83 ms
64 bytes from waw02s07-in-f174.1e100.net (172.217.20.174): icmp_seq=3 ttl=117 time=4.77 ms
64 bytes from waw02s07-in-f174.1e100.net (172.217.20.174): icmp_seq=4 ttl=117 time=5.08 ms
64 bytes from par10s49-in-f14.1e100.net (172.217.20.174): icmp_seq=5 ttl=117 time=4.79 ms
64 bytes from par10s49-in-f14.1e100.net (172.217.20.174): icmp_seq=6 ttl=117 time=4.74 ms
64 bytes from par10s49-in-f14.1e100.net (172.217.20.174): icmp_seq=7 ttl=117 time=4.69 ms
64 bytes from waw02s07-in-f14.1e100.net (172.217.20.174): icmp_seq=8 ttl=117 time=4.71 ms
64 bytes from par10s49-in-f14.1e100.net (172.217.20.174): icmp_seq=9 ttl=117 time=4.83 ms
64 bytes from waw02s07-in-f174.1e100.net (172.217.20.174): icmp_seq=10 ttl=117 time=4.67 ms
64 bytes from waw02s07-in-f174.1e100.net (172.217.20.174): icmp_seq=11 ttl=117 time=4.75 ms
^C
```



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## Exemple d'un ticket GLPI avec résolution du problème

Download: 

Download:

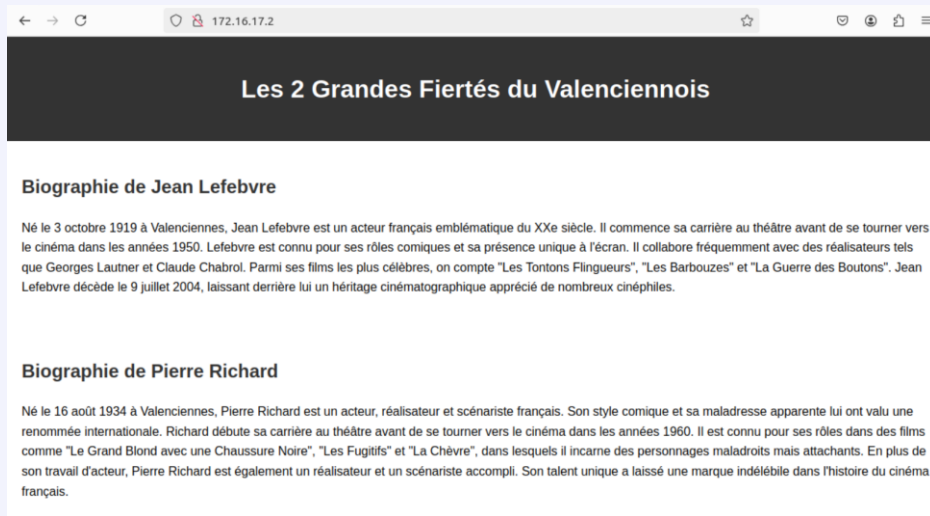




# NGINX

```
peutetre@djanet:/var/www/html$ ls
index.html  index.nginx-debian.html
peutetre@djanet:/var/www/html$ sudo nano index.html
```

```
GNU nano 7.2 index.html
list-style: none;
padding: 0;
}
li {
margin-bottom: 10px;
}
a {
color: #007bff;
text-decoration: none;
}
a:hover {
text-decoration: underline;
}
</style>
</head>
<body>
<header>
<h1>Les 2 Grandes Fiertés du Valenciennois</h1>
</header>
<section id="biographie_lefebvre">
<h2>Biographie de Jean Lefebvre</h2>
<p>Né le 3 octobre 1919 à Valenciennes, Jean Lefebvre est un acteur français emblématique du XXe siècle. Il commence sa car<
</section>
<section id="biographie_richard">
<h2>Biographie de Pierre Richard</h2>
<p>Né le 16 août 1934 à Valenciennes, Pierre Richard est un acteur, réalisateur et scénariste français. Son style comique <
</section>
<footer>
<p>©copy; 2024 Les 2 Grandes Fiertés du Valenciennois. Contactez-nous à <a href="mailto:contact@destinsexceptionnels.com">c<
</footer>
</body>
</html>
```



# NGINX

Download:





# SECURE SHELL (SSH)

## SSH sur notre super GLPI

```
PS C:\windows\system32> ssh -t peutetre@10.0.2.25 -p 9022 ssh peutetre@172.16.16.4
Linux superglpi 6.1.0-18-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.76-1 (2024-02-01) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Thu Jul 18 10:39:18 2024 from 10.0.2.12
peutetre@superglpi:~$
```



## SSH sur notre serveur web NGINX

```
peutetre@djanet: ~
PS C:\windows\system32> ssh -t peutetre@10.0.2.25 -p 9022 ssh peutetre@172.16.17.2
Linux djanet 6.1.0-23-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.99-1 (2024-07-15) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Thu Jul 18 10:16:34 2024 from 10.0.2.12
peutetre@djanet:~$
```

## SSH sur notre Windows serveur (DNS)

```
Connection to 10.0.2.25 closed.
PS C:\windows\system32> ssh -t peutetre@10.0.2.25 -p 9022 ssh ylias@172.16.16.3
ylias@172.16.16.3's password:
Microsoft Windows [version 10.0.20348.169]
(c) Microsoft Corporation. Tous droits réservés.

ylias@SERVEURDNS C:\Users\Ylias>
```



Download:





# Scripts pour les différentes machines

## SCRIPT POUR NGINX

```
1 #!/bin/bash
2
3 #Démarré nginx
4 nginx_start() {
5     > sudo systemctl enable --now nginx
6 }
7
8 #Arrête nginx
9 nginx_stop() {
10     > sudo systemctl disable --now nginx
11 }
12
13 #Redémarre nginx
14 nginx_restart() {
15     > sudo systemctl restart nginx
16 }
17
18 #Met à jour le système
19 package_update() {
20     > sudo apt-get update
21 }
22
23 #Arrête le script
24 script_stop() {
25     > exit 1
26 }
27
28 #Affichage du menu
29 echo "Menu :"
30 echo "1. Démarrer nginx"
31 echo "2. Arrêter nginx"
32 echo "3. Redémarrer nginx"
33 echo "4. Mettre à jour le système"
34 echo "5. Quitter le menu"
35
36 #Choix de l'utilisateur
37 read -p "Choisissez une option : " choice
38
39 #Lancement de la fonction selon le choix
40 case $choice in
41     1) > nginx_start
42        ;;
43     2) > nginx_stop
44        ;;
45     3) > nginx_restart
46        ;;
47     4) > package_update
48        ;;
49     5) > script_stop
50        ;;
51     *) > esac
52 }
```

## SCRIPT POUR



& Grafana

```
1 #!/bin/bash
2
3 #démarré prometheus
4 prometheus_start() {
5     > sudo systemctl enable --now prometheus.service
6 }
7
8 #Arrête prometheus
9 prometheus_stop() {
10     > sudo systemctl disable --now prometheus.service
11 }
12
13 #Redémarre prometheus
14 prometheus_restart() {
15     > sudo systemctl restart prometheus.service
16 }
17
18 #Démarré graphana
19 graphana_start() {
20     > sudo systemctl enable --now graphana-server.service
21 }
22
23 #Arrête graphana
24 graphana_stop() {
25     > sudo systemctl disable --now graphana-server.service
26 }
27
28 #Redémarre graphana
29 graphana_restart() {
30     > sudo systemctl restart graphana-server.service
31 }
32
33 #Met à jour le système
34 package_update() {
35     > sudo apt-get update
36 }
37
38 #Arrête le script
39 script_stop() {
40     > exit 1
41 }
42
43 #Affichage du menu
44 echo "Menu :"
45 echo "1. Démarrer Prometheus"
46 echo "2. Arrêter Prometheus"
47 echo "3. Redémarrer Prometheus"
48 echo "4. Démarrer Graphana"
49 echo "5. Arrêter Graphana"
50 echo "6. Redémarrer Graphana"
51 echo "7. Mettre à jour le système"
52 echo "8. Quitter le menu"
53
54 #Choix
55 read -p "Choisissez une option : " choice
56
57 #Lancement de la fonction selon le choix
58 case $choice in
59     1) > prometheus_start
60        ;;
61     2) > prometheus_stop
62        ;;
63     3) > prometheus_restart
64        ;;
65     4) > graphana_start
66        ;;
67     5) > graphana_stop
68        ;;
69     6) > graphana_restart
70        ;;
71     7) > package_update
72        ;;
73     8) > script_stop
74        ;;
75     *) > esac
76 }
```



Download:





# Scripts pour les différentes machines

SCRIPT POUR **NGINX**

```
peutetre@djanet:~$ ./menu.sh
Menu :
1. Démarrer nginx
2. Arrêter nginx
3. Redémarrer nginx
4. Mettre à jour le système
5. Quitter le menu
Choisissez une option : 3
peutetre@djanet:~$ ./menu.sh
Menu :
1. Démarrer nginx
2. Arrêter nginx
3. Redémarrer nginx
4. Mettre à jour le système
5. Quitter le menu
Choisissez une option : 5
peutetre@djanet:~$
```

SCRIPT POUR



&



Grafana

```
peutetre@fifou: ~$ ./menu.sh
Menu :
1. Démarrer Prometheus
2. Arrêter Prometheus
3. Redémarrer Prometheus
4. Démarrer Graphana
5. Arrêter Graphana
6. Redémarrer Graphana
7. Mettre à jour le système
8. Quitter le menu
Choisissez une option : 8
peutetre@fifou: ~$ ./menu.sh
Menu :
1. Démarrer Prometheus
2. Arrêter Prometheus
3. Redémarrer Prometheus
4. Démarrer Graphana
5. Arrêter Graphana
6. Redémarrer Graphana
7. Mettre à jour le système
8. Quitter le menu
Choisissez une option :
```



Download:



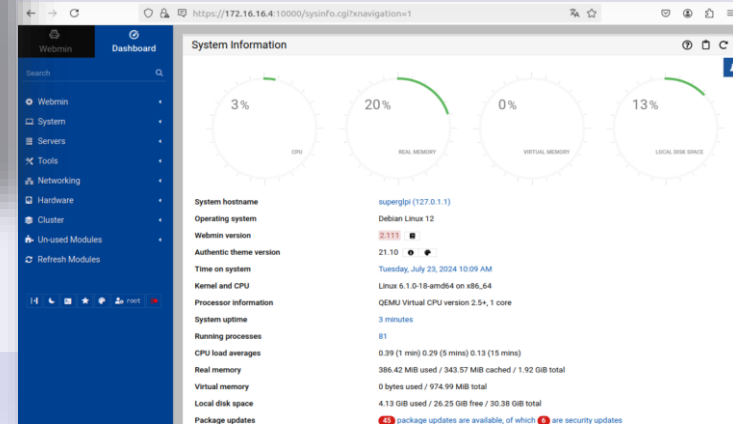
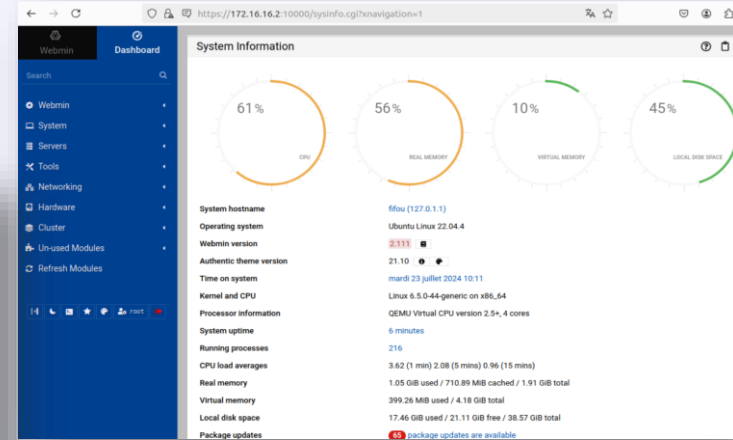
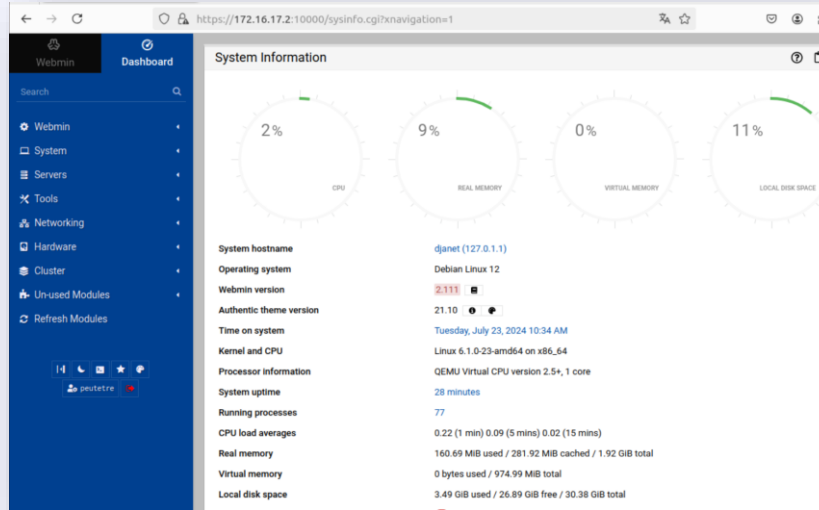


# Webmin

## Portail Webmin sur chaque machine linux



You must enter a username and password to login to the server on 172.16.17.2

☐ Remember me



# Grafana

## 05

# Prometheus/Grafana

Node Exporter



# Node Exporter

```
peutetre@fflow:~$ sudo systemctl status node_exporter
● node_exporter.service - Node Exporter
   Loaded: loaded (/etc/systemd/system/node_exporter.service; enabled; vendor preset: enabled)
   Active: active (running) since Tue 2024-07-23 10:05:01 CEST; 39min ago
   Main PID: 611 (node_exporter)
     Tasks: 5 (limit: 2259)
    Memory: 784.0K
       CPU: 67ms
   CGroup: /system.slice/node_exporter.service
           └─611 /usr/local/bin/node_exporter

jul. 23 10:05:02 fflow node_exporter[611]: ts=2024-07-23T08:05:02.802Z caller=node_exporter.go:117 level=info collector=thermal_zone
jul. 23 10:05:02 fflow node_exporter[611]: ts=2024-07-23T08:05:02.803Z caller=node_exporter.go:117 level=info collector=time
jul. 23 10:05:02 fflow node_exporter[611]: ts=2024-07-23T08:05:02.803Z caller=node_exporter.go:117 level=info collector=timex
jul. 23 10:05:02 fflow node_exporter[611]: ts=2024-07-23T08:05:02.803Z caller=node_exporter.go:117 level=info collector=udp_queues
jul. 23 10:05:02 fflow node_exporter[611]: ts=2024-07-23T08:05:02.803Z caller=node_exporter.go:117 level=info collector=uname
jul. 23 10:05:02 fflow node_exporter[611]: ts=2024-07-23T08:05:02.803Z caller=node_exporter.go:117 level=info collector=vmstat
jul. 23 10:05:02 fflow node_exporter[611]: ts=2024-07-23T08:05:02.803Z caller=node_exporter.go:117 level=info collector=xfs
jul. 23 10:05:02 fflow node_exporter[611]: ts=2024-07-23T08:05:02.803Z caller=node_exporter.go:117 level=info collector=zfs
jul. 23 10:05:02 fflow node_exporter[611]: ts=2024-07-23T08:05:02.805Z caller=tls_config.go:232 level=info msg="Listening on" addr=
jul. 23 10:05:02 fflow node_exporter[611]: ts=2024-07-23T08:05:02.805Z caller=tls_config.go:235 level=info msg="TLS is disabled."
Lines 1-20/20 (END)
```

```
peutetre@superglpi:~$ sudo systemctl status node_exporter
● node_exporter.service - Node Exporter
   Loaded: loaded (/etc/systemd/system/node_exporter.service; enabled; preset: enabled)
   Active: active (running) since Tue 2024-07-23 10:05:09 CEST; 46min ago
   Main PID: 433 (node_exporter)
     Tasks: 4 (limit: 2307)
    Memory: 31.0M
       CPU: 6.75s
   CGroup: /system.slice/node_exporter.service
           └─433 /usr/local/bin/node_exporter

Jul 23 10:05:10 superglpi node_exporter[433]: ts=2024-07-23T08:05:10.387Z caller=node_exporter.go:117 level=info collector=thermal_zone
Jul 23 10:05:10 superglpi node_exporter[433]: ts=2024-07-23T08:05:10.387Z caller=node_exporter.go:117 level=info collector=time
Jul 23 10:05:10 superglpi node_exporter[433]: ts=2024-07-23T08:05:10.387Z caller=node_exporter.go:117 level=info collector=timex
Jul 23 10:05:10 superglpi node_exporter[433]: ts=2024-07-23T08:05:10.388Z caller=node_exporter.go:117 level=info collector=udp_queues
Jul 23 10:05:10 superglpi node_exporter[433]: ts=2024-07-23T08:05:10.388Z caller=node_exporter.go:117 level=info collector=uname
Jul 23 10:05:10 superglpi node_exporter[433]: ts=2024-07-23T08:05:10.388Z caller=node_exporter.go:117 level=info collector=vmstat
Jul 23 10:05:10 superglpi node_exporter[433]: ts=2024-07-23T08:05:10.388Z caller=node_exporter.go:117 level=info collector=xfs
Jul 23 10:05:10 superglpi node_exporter[433]: ts=2024-07-23T08:05:10.388Z caller=node_exporter.go:117 level=info collector=zfs
Jul 23 10:05:10 superglpi node_exporter[433]: ts=2024-07-23T08:05:10.396Z caller=tls_config.go:232 level=info msg="Listening on" address=[::]:9100
Jul 23 10:05:10 superglpi node_exporter[433]: ts=2024-07-23T08:05:10.396Z caller=tls_config.go:235 level=info msg="TLS is disabled." http2=false address=[::]:
Lines 1-20/20 (END)
peutetre@superglpi:~$
```

```
node_exporter[433] not running.
[2.7.2-RELEASE][admin@pfSense.hone.arpa]/root: service node_exporter onestart
Starting node_exporter.
[2.7.2-RELEASE][admin@pfSense.hone.arpa]/root: service node_exporter enable
node_exporter enabled in /etc/rc.conf
[2.7.2-RELEASE][admin@pfSense.hone.arpa]/root: service node_exporter status
node_exporter is running as pid 5264.
[2.7.2-RELEASE][admin@pfSense.hone.arpa]/root: 
```

```
peutetre@djanet:~$ sudo systemctl status node_exporter
● node_exporter.service - Node Exporter
   Loaded: loaded (/etc/systemd/system/node_exporter.service; enabled; preset: enabled)
   Active: active (running) since Tue 2024-07-23 10:05:19 CEST; 56min ago
   Main PID: 433 (node_exporter)
     Tasks: 5 (limit: 2306)
    Memory: 29.1M
       CPU: 8.361s
   CGroup: /system.slice/node_exporter.service
           └─433 /usr/local/bin/node_exporter
```

NGINX



windows\_exporter  
prometheus-community  
0.20.0



39,0 Mo  
8/07/2024

Modifier

Désinstaller



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# Node exporter

Grafana Prometheus Time Series Node Exporter

172.16.16.2:9100

## Node Exporter

[Metrics](#)

```
← → ↺ 172.16.16.2:9100/metrics

# HELP go_gc_duration_seconds A summary of the pause duration of garbage collection cycles.
# TYPE go_gc_duration_seconds summary
go_gc_duration_seconds{quantile="0"} 0
go_gc_duration_seconds{quantile="0.25"} 0
go_gc_duration_seconds{quantile="0.5"} 0
go_gc_duration_seconds{quantile="0.75"} 0
go_gc_duration_seconds{quantile="1"} 0
go_gc_duration_seconds_sum 0
go_gc_duration_seconds_count 0
# HELP go_goroutines Number of goroutines that currently exist.
# TYPE go_goroutines gauge
go_goroutines 7
# HELP go_info Information about the Go environment.
# TYPE go_info gauge
go_info{version="go1.19.3"} 1
# HELP go_memstats_alloc_bytes Number of bytes allocated and still in use.
# TYPE go_memstats_alloc_bytes gauge
go_memstats_alloc_bytes 877456
# HELP go_memstats_alloc_bytes_total Total number of bytes allocated, even if freed.
# TYPE go_memstats_alloc_bytes_total counter
go_memstats_alloc_bytes_total 877456
# HELP go_memstats_buck_hash_sys_bytes Number of bytes used by the profiling bucket hash table.
# TYPE go_memstats_buck_hash_sys_bytes gauge
go_memstats_buck_hash_sys_bytes 1.445531e+06
# HELP go_memstats_frees_total Total number of frees.
# TYPE go_memstats_frees_total counter
go_memstats_frees_total 672
# HELP go_memstats_gc_sys_bytes Number of bytes used for garbage collection system metadata.
# TYPE go_memstats_gc_sys_bytes gauge
go_memstats_gc_sys_bytes 8.168446e+06
# HELP go_memstats_heap_alloc_bytes Number of heap bytes allocated and still in use.
# TYPE go_memstats_heap_alloc_bytes gauge
go_memstats_heap_alloc_bytes 877456
# HELP go_memstats_heap_idle_bytes Number of heap bytes waiting to be used.
# TYPE go_memstats_heap_idle_bytes gauge
go_memstats_heap_idle_bytes 1.318912e+06
# HELP go_memstats_heap_inuse_bytes Number of heap bytes that are in use.
# TYPE go_memstats_heap_inuse_bytes gauge
go_memstats_heap_inuse_bytes 2.547712e+06
# HELP go_memstats_heap_objects Number of allocated objects.
# TYPE go_memstats_heap_objects gauge
go_memstats_heap_objects 7879
# HELP go_memstats_heap_released_bytes Number of heap bytes released to OS.
# TYPE go_memstats_heap_released_bytes gauge
go_memstats_heap_released_bytes 1.318912e+06
# HELP go_memstats_heap_sys_bytes Number of heap bytes obtained from system.
# TYPE go_memstats_heap_sys_bytes gauge
go_memstats_heap_sys_bytes 3.866624e+06
# HELP go_memstats_last_gc_time_seconds Number of seconds since 1970 of last garbage collection.
# TYPE go_memstats_last_gc_time_seconds gauge
go_memstats_last_gc_time_seconds 0
# HELP go_memstats_lookups_total Total number of pointer lookups.
# TYPE go_memstats_lookups_total counter
go_memstats_lookups_total 0
# HELP go_memstats_mallocs_total Total number of mallocs.
# TYPE go_memstats_mallocs_total counter
go_memstats_mallocs_total 8551
# HELP go_memstats_mcache_inuse_bytes Number of bytes in use by mcache structures.
# TYPE go_memstats_mcache_inuse_bytes gauge
go_memstats_mcache_inuse_bytes 1280
# HELP go_memstats_mcache_sys_bytes Number of bytes used for mcache structures obtained from system.
# TYPE go_memstats_mcache_sys_bytes gauge
go_memstats_mcache_sys_bytes 15680
# HELP go_memstats_mspan_inuse_bytes Number of bytes in use by mspan structures.
```



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# Prometheus

## Fichier yml

```
# Load rules once and periodically evaluate then according to the global 'evaluation_interval'.
rule_files:
  # - "first_rules.yml"
  # - "second_rules.yml"

# A scrape configuration containing exactly one endpoint to scrape:
# Here it's Prometheus itself.
scrape_configs:
  # The job name is added as a label 'job=<job_name>' to any timeseries scraped from this config.
  - job_name: "prometheus_server"
    static_configs:
      - targets: ["localhost:9090"]

  - job_name: "glpi"
    scrape_interval: 10s
    static_configs:
      - targets: ["172.16.16.4:9100"]

  - job_name: "serveur_web"
    scrape_interval: 10s
    static_configs:
      - targets: ["172.16.17.2:9100"]

  - job_name: "dns"
    scrape_interval: 10s
    static_configs:
      - targets: ["172.16.16.3:9182"]

  - job_name: "pfsense"
    scrape_interval: 10s
    static_configs:
      - targets: ["172.16.0.1:9100"]
```



Prometheus Alerts Graph Status Help

### Targets

All Unhealthy Collapse All

Filter by endpoint or labels

**dns (1/1 up)** [View](#)

Endpoint	State	Labels	Last Scrape	Scrape Duration	Error
http://172.16.16.3:9182/metrics	Up	instance="172.16.16.3:9182" job="dns"	7m 23s ago	660.376ms	

**glpi (1/1 up)** [View](#)

Endpoint	State	Labels	Last Scrape	Scrape Duration	Error
http://172.16.16.4:9100/metrics	Up	instance="172.16.16.4:9100" job="glpi"	7m 15s ago	24.768ms	

**pfsense (1/1 up)** [View](#)

Endpoint	State	Labels	Last Scrape	Scrape Duration	Error
http://172.16.0.1:9100/metrics	Up	instance="172.16.0.1:9100" job="pfsense"	7m 16s ago	11.216ms	

**prometheus\_server (1/1 up)** [View](#)

Endpoint	State	Labels	Last Scrape	Scrape Duration	Error
http://localhost:9090/metrics	Up	instance="localhost:9090" job="prometheus_server"	7m 24s ago	10.538ms	

**serveur\_web (1/1 up)** [View](#)

Endpoint	State	Labels	Last Scrape	Scrape Duration	Error
http://172.16.17.2:9100/metrics	Up	instance="172.16.17.2:9100" job="serveur_web"	7m 21s ago	38.059ms	



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# Grafana

## Dashboards

Create and manage dashboards to visualize your data

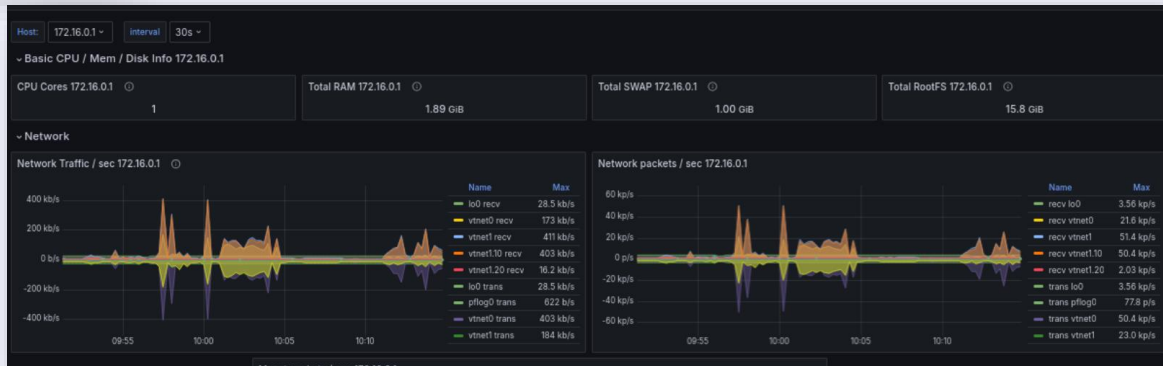
Search for dashboards and folders

Filter by tag ☐ Starred

Name	Tags
glpi /nginx / console	
pfSense	System
W_server DNS	Windows



ID: 11491



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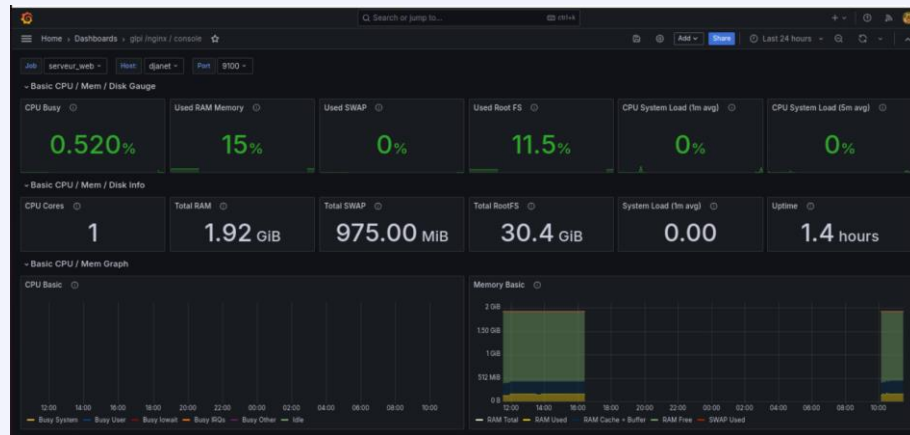
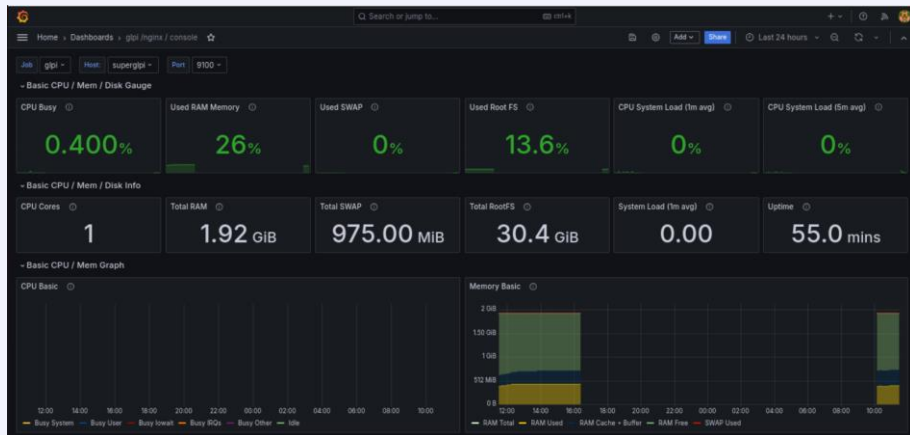




# Grafana



ID: 12486



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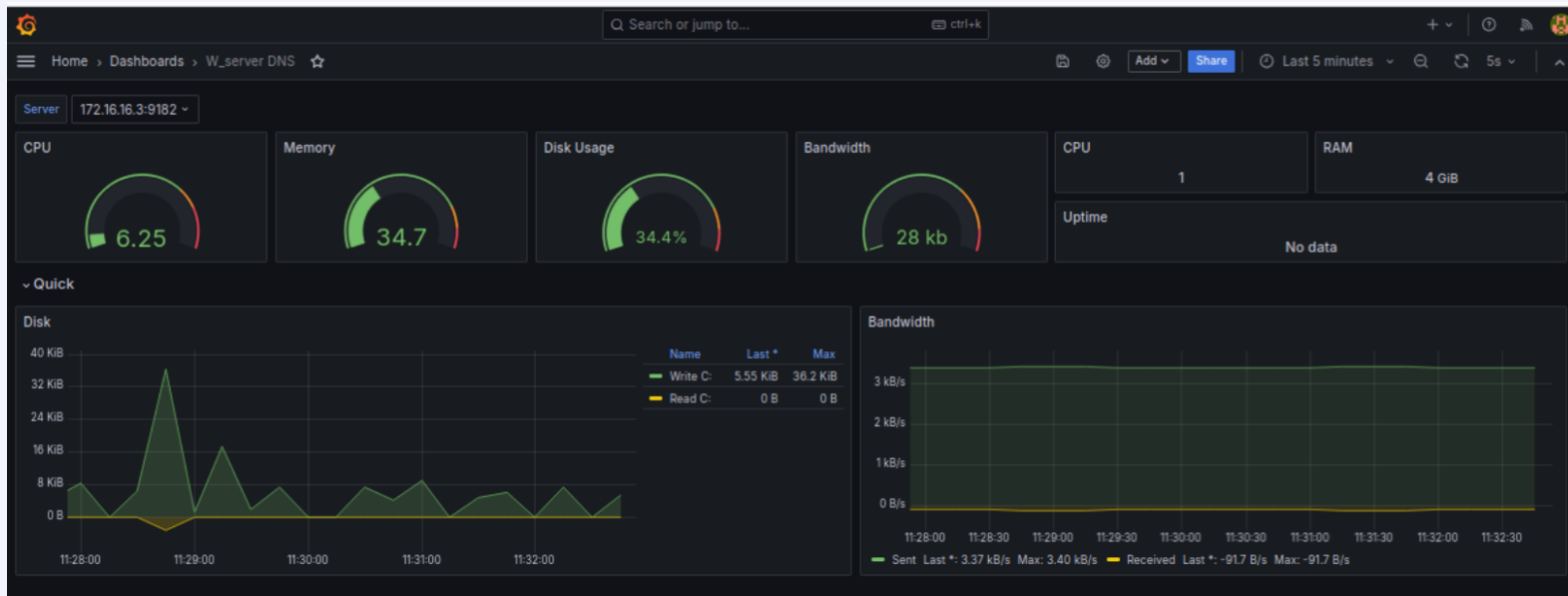




# Grafana



ID: 3969



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# Merci !

De la part de Michaël, Arnaud, Ilyas et le grand chef Lucas !



NGINX



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