

TP Docker

2. Environnement et preparation

Machine windows 11

Docker Desktop 4.48.0

WSL2 activé

Mysql-win

Nginx-win

Redis-win

Machine ubuntu 24.04.3

Docker ubuntu : 24.04.3

Mysql-ubuntu

Nginx-ubuntu

Redis-win

4. windows

```
redis-win    Up 3 minutes           0.0.0.0:6379->6379/tcp, [::]:6379->6379/tcp
nginx-win    Up 17 minutes          0.0.0.0:8080->80/tcp, [::]:8080->80/tcp
mysql-win    Up 17 minutes (healthy) 0.0.0.0:3306->3306/tcp, [::]:3306->3306/tcp
```

```
9ffbc818f8de  nginx-win  0.00%   12.92MiB / 15.33GiB  0.08%   1.9kB / 126B   6.59MB / 4.1kB  17
4ebabd55039a  mysql-win  0.88%   450.7MiB / 15.33GiB  2.87%   998B / 126B    106MB / 17.3MB  39
```

```

StatusCode      : 200
StatusDescription : OK
Content         : <!DOCTYPE html>
                  <html>
                  <head>
                  <title>Welcome to nginx!</title>
                  <style>
                  html { color-scheme: light dark; }
                  body { width: 35em; margin: 0 auto;
                  font-family: Tahoma, Verdana, Arial, sans-serif; }
                  </style>...
RawContent      : HTTP/1.1 200 OK
                  Connection: keep-alive
                  Accept-Ranges: bytes
                  Content-Length: 615
                  Content-Type: text/html
                  Date: Tue, 14 Oct 2025 14:02:09 GMT
                  ETag: "67ffa8c6-267"
                  Last-Modified: Wed, 16 Apr 2025 ...
Forms           : {}
Headers         : {[Connection, keep-alive], [Accept-Ranges, bytes], [Content-Length, 615], [Content-Type, text/html]...}
Images         : {}
InputFields     : {}
Links           : {[@innerHTML=nginx.org; innerText=nginx.org; outerHTML=<A href="http://nginx.org/">nginx.org</A>; outerText=nginx.org; tagName=A;
                  href=http://nginx.org/}, @{innerHTML=nginx.com; innerText=nginx.com; outerHTML=<A href="http://nginx.com/">nginx.com</A>; outerText=nginx.com;
                  tagName=A; href=http://nginx.com/}]
ParsedHtml      : mshTML.HTMLDocumentClass
RawContentLength : 615

```

4. Ubuntu

```

redis-ubuntu    Up 24 seconds          0.0.0.0:6380->6379/tcp, [::]:6380->6379/tcp
nginx-ubuntu    Up 17 seconds          0.0.0.0:8081->80/tcp, [::]:8081->80/tcp
mysql-ubuntu    Up 11 seconds (healthy) 33060/tcp, 0.0.0.0:3307->3306/tcp, [::]:3307->3306/tcp

```

CONTAINER ID	NAME	CPU %	MEM USAGE / LIMIT	MEM %	NET I/O	BLOCK I/O	PIDS
185424a8f40e	nginx-ubuntu	0.00%	9.281MiB / 3.777GiB	0.24%	3.48kB / 126B	6.91MB / 4.1kB	3
6324a05075ba	redis-ubuntu	0.86%	13.28MiB / 3.777GiB	0.34%	7.62kB / 126B	10.7MB / 0B	6

```

<!DOCTYPE html>
<html>
<head>
<title>Welcome to nginx!</title>
<style>
html { color-scheme: light dark; }
body { width: 35em; margin: 0 auto;
font-family: Tahoma, Verdana, Arial, sans-serif; }
</style>
</head>
<body>
<h1>Welcome to nginx!</h1>
<p>If you see this page, the nginx web server is successfully installed and
working. Further configuration is required.</p>

<p>For online documentation and support please refer to
<a href="http://nginx.org/">nginx.org</a>.<br/>
Commercial support is available at
<a href="http://nginx.com/">nginx.com</a>.</p>

<p><em>Thank you for using nginx.</em></p>
</body>
</html>

```

PONG

5. Problèmes rencontrés & solutions

Pas de problèmes spécifiques rencontrés

6. Bonnes pratiques Docker retenues

utiliser des noms explicites pour les conteneurs, images et réseaux

préférer les volumes Docker plutôt que des chemins locaux, pour plus de portabilité et de gestion.

passer les mots de passe via des **variables d'environnement** sécurisées ou des fichiers secrets, jamais en clair dans les commandes

ajouter un HEALTHCHECK dans le Dockerfile ou via docker run pour surveiller automatiquement l'état du conteneur.

utiliser docker logs, des volumes ou un système de collecte (comme ELK ou Loki) pour suivre et conserver les journaux.