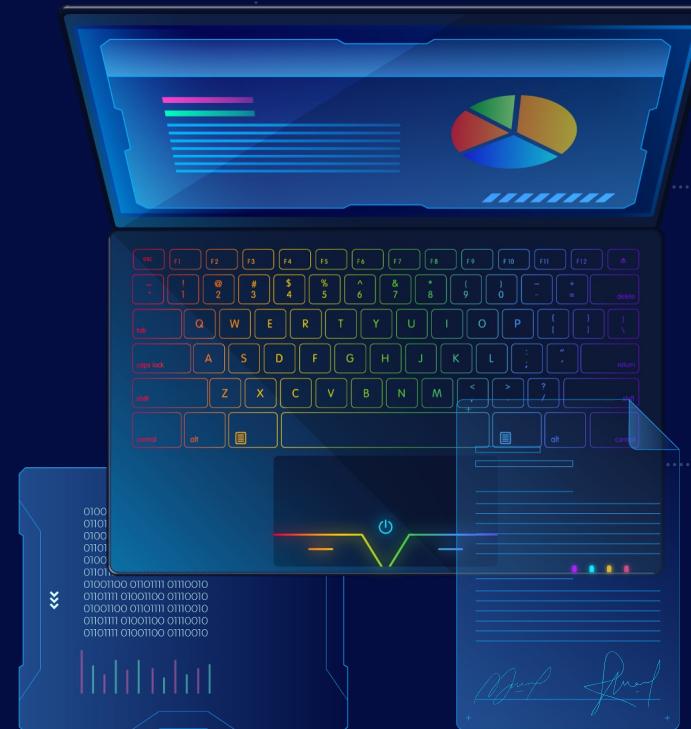




DEPLOIEMENT D'UNE APPLICATION WEB AVEC MICROSOFT AZURE

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PLAN :



- I. Plateforme Microsoft Azure
- II. Les services Azure
- III. Les méthodes de déploiement d'une application web:

- A partir d'une machine virtuelle Linux créée sous Azure
- En utilisant Web App service sous azure
- Déployer une application web à partir d'azure container instance (ACI) en utilisant azure container registry (ACR)





Plateforme Microsoft Azure

Microsoft Azure est un ensemble de services de cloud computing proposés par Microsoft pour les entreprises et les développeurs. Il permet de développer, tester, déployer et gérer des applications et des services à l'aide d'outils et de technologies Microsoft. Il comprend des services tels que les machines virtuelles, le stockage, la base de données, le développement d'applications, l'analyse de données, l'Internet des objets, la gestion de réseaux et la cybersécurité .

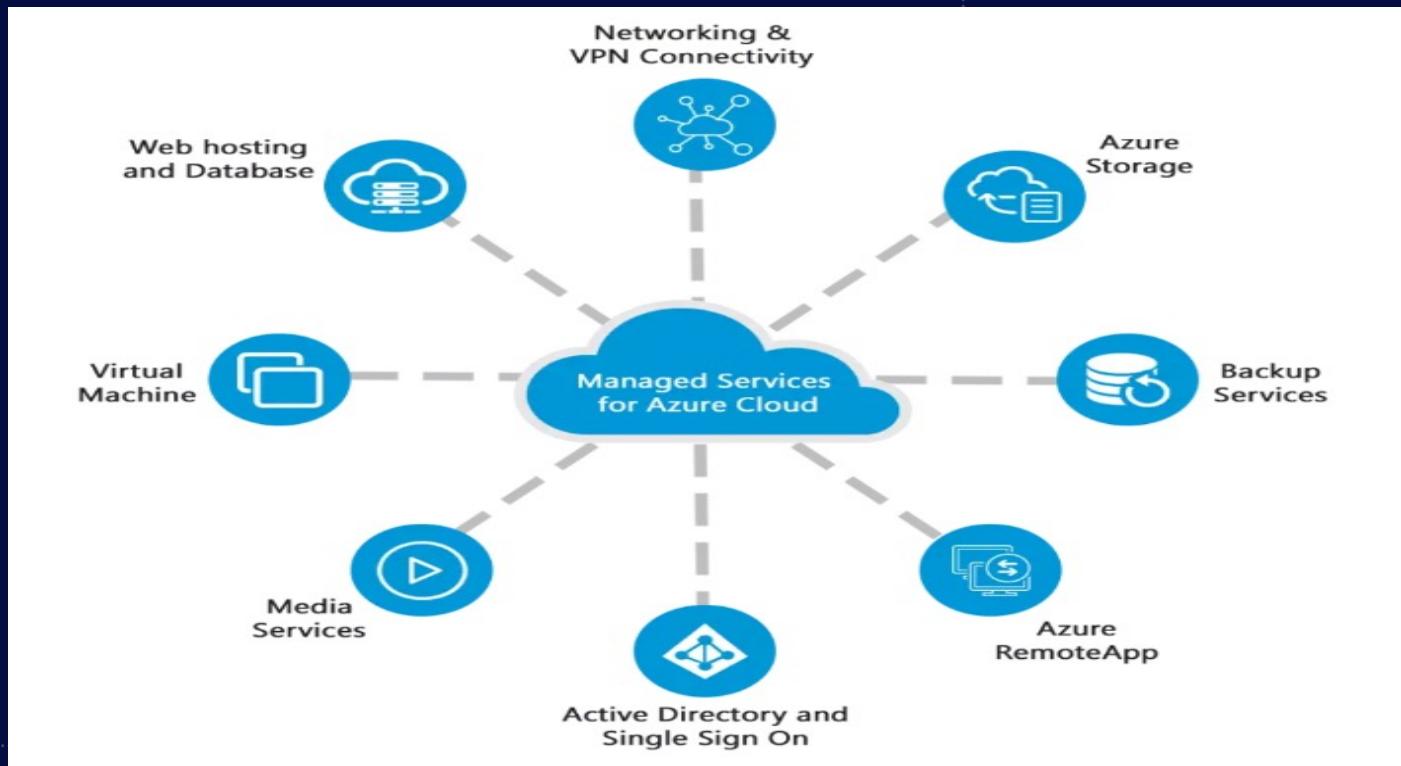


**Microsoft
Azure**





LES SERVICES AZURE



DEPLOIEMENT D'UNE APPLICATION WEB A PARTIR D'UNE MACHINE VIRTUELLE LINUX



1. Création d'une machine virtuelle Linux sur Azure

The screenshot shows the Azure portal interface for a virtual machine named "linuxvm". The "Overview" tab is selected in the left sidebar. The main pane displays the VM's configuration, including its resource group, status, location, and subscription. The "Public IP address" field is highlighted with a red box and contains the value "40.76.137.24". Below the main configuration, there are tabs for "Properties", "Monitoring", "Capabilities (7)", "Recommendations", and "Tutorials". Under the "Properties" tab, there are sections for "Virtual machine", "Networking", and "Size". The "Virtual machine" section lists details like Computer name (linuxvm), Operating system (Linux (ubuntu 20.04)), and Agent status (Ready). The "Networking" section shows the Public IP address (40.76.137.24), Private IP address (10.1.0.4), and DNS name (dnslinux.eastus.cloudapp.azure.com). The "Size" section indicates the VM is Standard B1s (1 vcpu, 1 GiB memory).

Resource group	: linuxvm_group
Status	: Running
Location	: East US (Zone 1)
Subscription	: Azure for Students
Subscription ID	: 0b01b11f-c9a1-4e01-8fd7-48b4db79d1ba
Availability zone	: 1
Tags	: Add tags

Operating system	: Linux (ubuntu 20.04)
Size	: Standard B1s (1 vcpu, 1 GiB memory)
Public IP address	40.76.137.24
Virtual network/subnet	: linuxvm-vnet/default
DNS name	: dnslinux.eastus.cloudapp.azure.com
Health state	: -

Computer name	: linuxvm
Operating system	: Linux (ubuntu 20.04)
Image publisher	: canonical
Image offer	: 0001-com-ubuntu-server-focal
Image plan	: 20_04-lts-gen2
VM generation	: V2
VM architecture	: x64
Agent status	: Ready

Public IP address	: 40.76.137.24 (Network interface linuxvm665_z1)
Public IP address (IPv6)	: -
Private IP address	: 10.1.0.4
Private IP address (IPv6)	: -
Virtual network/subnet	: linuxvm-vnet/default
DNS name	: dnslinux.eastus.cloudapp.azure.com

Size	: Standard B1s (1 vcpu, 1 GiB memory)
------	---------------------------------------

2. Connexion à la machine virtuelle via SSH :

```
souhir@macbook ~ % ssh -i ~/Downloads/sshkey.pem azureuser@40.76.137.24
@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@WARNING: UNPROTECTED PRIVATE KEY FILE! @@@@ @@
Permissions 0644 for '/Users/souhir/Downloads/sshkey.pem' are too open.
It is required that your private key files are NOT accessible by others.
This private key will be ignored.
Load key "/Users/souhir/Downloads/sshkey.pem": bad permissions
[azureuser@40.76.137.24's password:
Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.15.0-1052-azure x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

 System information as of Sun Dec  3 15:07:31 UTC 2023

 System load:  0.05           Processes:          115
 Usage of /:   15.8% of 28.89GB  Users logged in:   1
 Memory usage: 70%            IPv4 address for eth0: 10.1.0.4
 Swap usage:   0%

 * Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s
 just raised the bar for easy, resilient and secure K8s cluster deployment.

 https://ubuntu.com/engage/secure-kubernetes-at-the-edge

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

New release '22.04.3 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Sun Dec  3 14:27:10 2023 from 197.28.0.45
[azureuser@linuxvm:~$ sudo mysql -u root -p
```

3. Configuration de l'environnement sur la MV : - Lancement de XAMPP



```
azureuser@linuxvm:~$ sudo /opt/lampp/lampp start
Starting XAMPP for Linux 8.2.12-0...
XAMPP: Starting Apache.../opt/lampp/share/xampp/xampplib: line 22: netstat: command not found
/opt/lampp/share/xampp/xampplib: line 22: netstat: command not found
ok.
XAMPP: Starting MySQL...already running.
XAMPP: Starting ProFTPD...already running.
```



- Clone web app from github avec git clone:



```
azureuser@linuxvm:/opt/lampp/htdocs$ cd Hospital-Management-System
azureuser@linuxvm:/opt/lampp/htdocs/Hospital-Management-System$ ls
README.md      composer.json    error1.php    header.php   logout1.php       search.php
TCPDF          contact.css     error2.php    images       master           services.html
admin-panel.php contact.html   font-awesome img         messearch.php   style1.css
admin-panel1.php contact.php   fonts        include      myhmsdb.sql   style2.css
appsearch.php   css            func.php     index.php   newfunc.php   vendor
assets          doctor-panel.php func1.php    index1.php  patientsearch.php
bodybg          doctorsearch.php func2.php    js          plugins
color           error.php      func3.php    logout.php  prescribe.php
```

```
azureuser@linuxvm:/opt/lampp/htdocs/hospital/Hospital-Management-System$ sudo cp -r /var/www/html/Hospital-Management-System/ /opt/lampp/htdocs/
```



3. Configuration de base de données :

```
azureuser@linuxvm:/opt/lampp/bin$ ./mysql -u root -p
Enter password:
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 12
Server version: 10.4.32-MariaDB Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> CREATE DATABASE myhmsdb;
Query OK, 1 row affected (0.000 sec)

MariaDB [(none)]> exit
Bye
```

```
azureuser@linuxvm:/opt/lampp/bin$ sudo /opt/lampp/bin/mysql -u root -p myhmsdb < /opt/lampp/htdocs/Hospital-Management-System/myhmsdb.sql
Enter password:
azureuser@linuxvm:/opt/lampp/bin$ ./mysql -u root -p
Enter password:
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 14
Server version: 10.4.32-MariaDB Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> USE myhmsdb;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
MariaDB [myhmsdb]> SHOW TABLES;
+----------------+
| Tables_in_myhmsdb |
+----------------+
| admintb           |
| appointmenttb    |
| contact          |
| doctb            |
| patreg           |
| prestb           |
+----------------+
6 rows in set (0.000 sec)
```

 We are here for you!



Patient Login

Email-ID:

Password:



```
souhir@macbook ~ % ssh -i ~/Downloads/sshkey.pem azureuser@40.76.137.24
@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@oooooooooooooo@oooooooooooooo@ooooo
@      WARNING: UNPROTECTED PRIVATE KEY FILE!      @
@ooooooooooooooooooooooooooooooooooooooooooooo
Permissions 0644 for '/Users/souhir/Downloads/sshkey.pem' are too open.
It is required that your private key files are NOT accessible by others.
This private key will be ignored.
Load key "/Users/souhir/Downloads/sshkey.pem": bad permissions
azureuser@40.76.137.24's password:
Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.15.0-1052-azure x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

 System information as of Wed Dec  6 12:39:22 UTC 2023

 System load:  0.0          Processes:           117
 Usage of /:   17.9% of 28.89GB  Users logged in:     0
 Memory usage: 37%           IPv4 address for eth0: 10.1.0.4
 Swap usage:   0%

 * Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s
 just raised the bar for easy, resilient and secure K8s cluster deployment.

 https://ubuntu.com/engage/secure-kubernetes-at-the-edge

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

New release '22.04.3 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Wed Dec  6 12:33:50 2023 from 197.28.27.232
[azureuser@linuxvm:~$ sudo /opt/lampp/lampp start
Starting XAMPP for Linux 8.2.12-0...
XAMPP: Starting Apache.../opt/lampp/share/xampp/xampplib: line 22: netstat: command not found
/opt/lampp/share/xampp/xampplib: line 22: netstat: command not found
fail.
```

start xampp

4. Teste de l'application:

The screenshot shows a web browser window with the URL [Not Secure | 40.76.137.24/Hospital-Management-System/](http://40.76.137.24/Hospital-Management-System/). The page title is "GLOBAL HOSPITALS". The main content area displays a registration form titled "Register as Patient". The form includes fields for Name (Mansri, Amal), Email (Amalmansri52@gmail.com), and Phone Number (2156767453). Below these fields are two password input fields, both marked with ".....". Underneath the first password field is a gender selection section with radio buttons for "Male" (selected) and "Female". A link "Already have an account?" is located below the gender fields. To the right of the second password field, the text "Matched" is displayed. At the bottom right of the form is a blue "Register" button. Above the "Register" button, there are three tabs: "Patient" (selected), "Doctor", and "Receptionist". The background of the page features a blue gradient with a white rounded rectangular overlay for the form.

```

tail: cannot open '/opt/lampp/logs/error.log' for reading: No such file or directory
XAMPP: Starting MySQL...already running.
XAMPP: Starting ProFTPD...already running.
azureuser@linuxvm:~$ ./mysql -u root -p
-bash: ./mysql: No such file or directory
azureuser@linuxvm:~$ cd /opt/lampp/bin
azureuser@linuxvm:/opt/lampp/bin$ ./mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 11
Server version: 10.4.32-MariaDB Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> USE myhmsdb;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
MariaDB [myhmsdb]> SELECT * FROM patreg ;
+----+----+----+----+----+----+----+
| pid | fname | lname | gender | email | contact | password | cpassword |
+----+----+----+----+----+----+----+
| 1 | Ram | Kumar | Male | ram@gmail.com | 9876543210 | ram123 | ram123 |
| 2 | Alia | Bhatt | Female | alia@gmail.com | 8976897689 | alia123 | alia123 |
| 3 | Shahrukh | Khan | Male | shahrukh@gmail.com | 8976898463 | shahrukh123 | shahrukh123 |
| 4 | Kishan | Lal | Male | kishansmart@gmail.com | 8838489464 | kishan123 | kishan123 |
| 5 | Gautam | Shankaram | Male | gautam@gmail.com | 9070897653 | gautam123 | gautam123 |
| 6 | Sushant | Singh | Male | sushant@gmail.com | 9059986865 | sushant123 | sushant123 |
| 7 | Nancy | Deborah | Female | nancy@gmail.com | 9128972454 | nancy123 | nancy123 |
| 8 | Kenny | Sebastian | Male | kenny@gmail.com | 9809879868 | kenny123 | kenny123 |
| 9 | William | Blake | Male | william@gmail.com | 8683619153 | william123 | william123 |
| 10 | Peter | Norvig | Male | peter@gmail.com | 9609362815 | peter123 | peter123 |
| 11 | Shraddha | Kapoor | Female | shraddha@gmail.com | 9768946252 | shraddha123 | shraddha123 |
| 12 | sw | W | Male | souhirwalha05@gmail.com | 1350097580 | 12345678 | 12345678 |
| 13 | sw | W | Male | souhirwalha05@gmail.com | 1350097580 | 12345678 | 12345678 |
| 14 | sw | W | Male | souhirwalha05@gmail.com | 1350097580 | 12345678 | 12345678 |
| 15 | Mansri | Amal | Female | Amalmansri52@gmail.com | 2156767453 | amal1234amal | amal1234amal |
+----+----+----+----+----+----+----+
15 rows in set (0.002 sec)

MariaDB [myhmsdb]>

```



DEPLOIEMENT D'UNE APPLICATION WEB A PARTIR D'UN SERVICE WEB

1. Création d'un service web (Web App Service) :

The screenshot shows the Microsoft Azure portal interface for managing a Web App Service. The main title bar reads "Microsoft Azure" and "Search resources, services, and docs (G+)". The user's email, "wafakatar8@gmail.com", is visible in the top right corner.

The left sidebar navigation includes:

- Home >
- azureweb22 (selected)
- Web App
- Search
- Overview (selected)
- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems
- Microsoft Defender for Cloud
- Events (preview)
- Deployment
- Deployment slots
- Deployment Center
- Settings
- Configuration
- Authentication
- Application Insights
- Identity

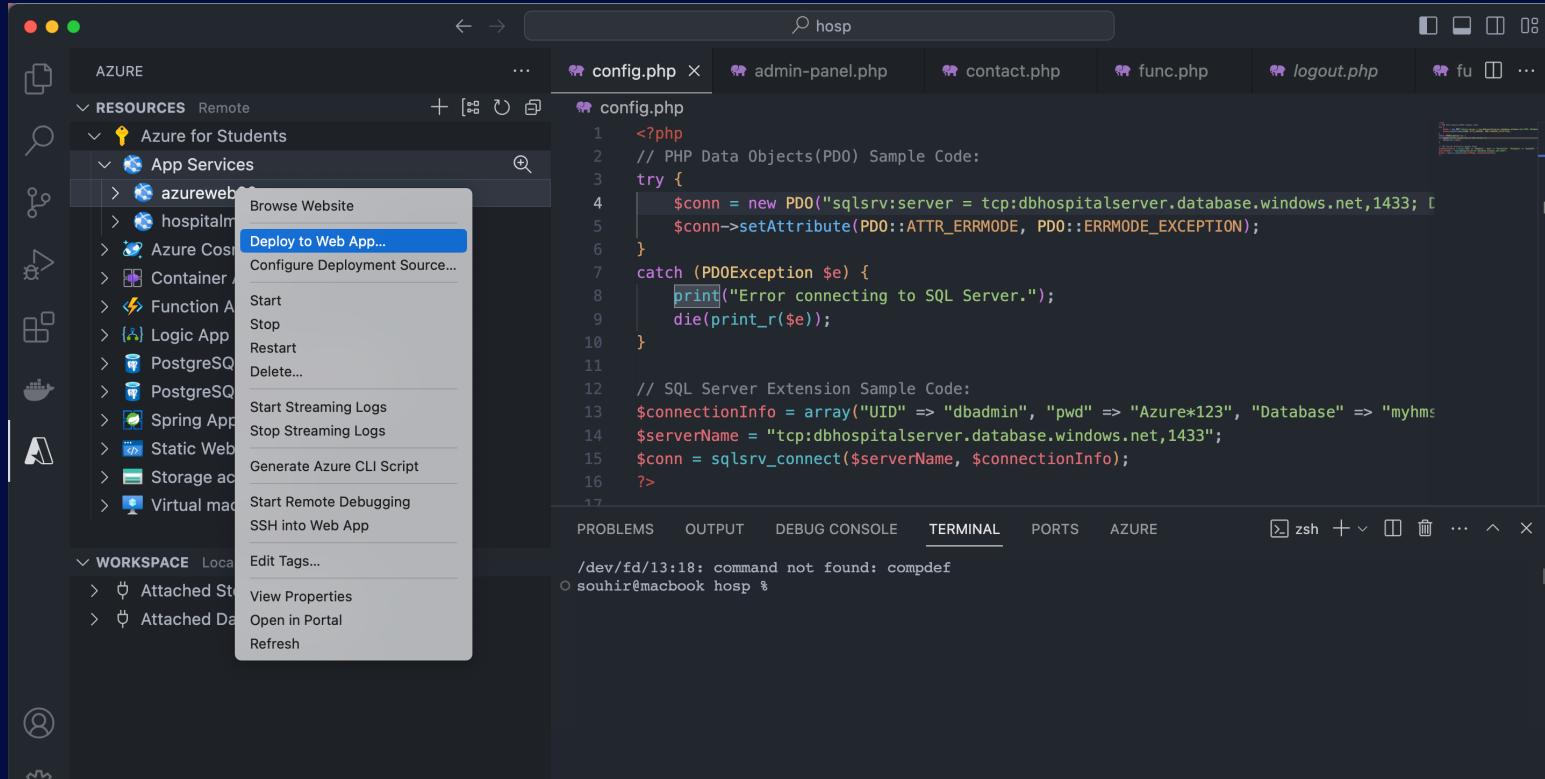
The main content area displays the "Overview" settings for the "azureweb22" app:

- Resource group (move):** azureweb22_group
- Status:** Running
- Location (move):** East US
- Subscription (move):** Azure for Students
- Subscription ID:** 0b01b11f-c9a1-4e01-8fd7-48b4db79d1ba
- Default domain:** azureweb22.azurewebsites.net
- App Service Plan:** ASP-azureweb22group-9c71 (F1: 1)
- Operating System:** Linux
- Health Check:** Not Configured
- GitHub Project:** <https://github.com/souhirwalha05/hospital-web>

The "Properties" tab is selected, showing the following details:

Web app
Name: azureweb22
Publishing model: Code
Runtime Stack: PHP - 8.2
Domains
Default domain: azureweb22.azurewebsites.net

2. Déploiement de l'application web :



3. Création d'un serveur sql:

Microsoft Azure Search resources, services, and docs (G+) ≡ ✉️ 🔔 ⚙️ ❓ 👤 wafakatar8@gmail.com RÉPERTOIRE PAR DÉFAUT

Home > dbhospitalserver

dbhospitalserver | SQL databases

SQL server

Search « » 🔍 Search to filter databases...

Database	Status	Pricing tier
myhmsdb	Online	Standard S1: 20 DTUs

Showing 1 - 1 of 1 results.

Overview Activity log Access control (IAM) Tags Quick start Diagnose and solve problems

Settings

Microsoft Entra ID SQL databases SQL elastic pools DTU quota Properties Locks

4. Crédit d'une base de données :

Microsoft Azure Search resources, services, and docs (G+) wafakatar8@gmail.com RÉPERTOIRE PAR DÉFAUT

Home > myhmsdb (dbhospitalserver/myhmsdb) ...

SQL myhmsdb (dbhospitalserver/myhmsdb) SQL database

Search Copy Restore Export Set server firewall Delete Connect with... Feedback

Overview JSON View

Activity log

Tags

Diagnose and solve problems

Query editor (preview)

Settings

Compute + storage

Connection strings

Properties

Locks

Data management

Replicas

Sync to other databases

Integrations

Essentials

Resource group ([move](#)) : [azurewebs2_group](#) Server name : [dbhospitalserver.database.windows.net](#)
Status : Online Elastic pool : [No elastic pool](#)
Location : East US Connection strings : [Show database connection strings](#)
Subscription ([move](#)) : [Azure for Students](#) Pricing tier : [Standard S1: 20 DTUs](#)
Subscription ID : 0b01b11f-c9a1-4e01-8fd7-48b4db79d1ba Earliest restore point : 2023-12-04 15:31 UTC

Tags ([edit](#)) : [Add tags](#)

Getting started Monitoring Properties Features Notifications (0) Integrations Tutorials

Start working with your database

Connect to your database and start working with data with a few simple steps. [Learn more](#)

Configure access Connect to application Start developing

4. Configuration de la base de données :

The screenshot shows the Microsoft Azure portal interface for managing a SQL database named 'myhmsdb'. The left sidebar contains navigation links for Overview, Activity log, Tags, Diagnose and solve problems, and the currently selected 'Query editor (preview)'. The main area displays the database 'myhmsdb (dbadmin)' with a note about limited object explorer. Below this, a 'Tables' section lists existing tables like 'dbo.admintb', 'dbo.appointmenttb', 'dbo.contact', 'dbo.docdtb', 'dbo.patreg', 'dbo.prestb', and views/stored procedures. A 'Query 1' editor window is open, containing the following SQL code:

```
1 CREATE TABLE `patreg` (
2     `pid` int(11) NOT NULL,
3     `fname` varchar(20) NOT NULL,
4     `lname` varchar(20) NOT NULL,
5     `gender` varchar(10) NOT NULL,
6     `email` varchar(30) NOT NULL,
7     `contact` varchar(10) NOT NULL,
8     `password` varchar(30) NOT NULL,
```

The 'Messages' tab in the editor shows 'Affected rows: 7' and a green success message 'Query succeeded | 0s'.

5. Connexion à la base de données :

The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes the Microsoft Azure logo, a search bar, and a user account icon. Below the navigation bar, the URL is `Home > myhmsdb (dbhospitalserver/myhmsdb)`. The main title is `myhmsdb (dbhospitalserver/myhmsdb) | Connection strings`. On the left sidebar, under the `Settings` section, the `Connection strings` option is selected. The main content area displays connection strings for various technologies. The `PHP` tab is active, showing PHP code for connecting to the database:

```
1 <?php
2 // PHP Data Objects(PDO) Sample Code:
3 try {
4     $conn = new PDO("sqlsrv:server = tcp:dbhospitalserver.database.windows.net,1433; Database = myhmsdb", "dbadmin", "{your_password_here}");
5     $conn->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
6 }
7 catch (PDOException $e) {
8     print("Error connecting to SQL Server.");
9     die(print_r($e));
10}
11
12 // SQL Server Extension Sample Code:
13 $connectionInfo = array("UID" => "dbadmin", "pwd" => "{your_password_here}", "Database" => "myhmsdb", "LoginTimeout" => 30, "Encrypt" => 1,
14 "TrustServerCertificate" => 0);
15 $serverName = "tcp:dbhospitalserver.database.windows.net,1433";
16 $conn = sqlsrv_connect($serverName, $connectionInfo);
17 ?>
```

Below the code, there is a link to [Download PHP driver for SQL server](#).

A screenshot of the Microsoft Visual Studio Code interface, showing a project structure for an Azure application.

Explorer (Left Side):

- AZURE** (Remote)
- RESOURCES** (Remote)
 - ✓ Azure for Students
 - App Services
 - ✓ azureweb22
 - > Application Settings
 - > Databases
 - > Deployments
 - Files
 - > .vscode
 - .DS_Store
 - admin-panel.php
 - config.php
 - contact.php
 - error1.php
 - favicon.png
 - font-awesome.min.css
 - func.php
 - func2.php
- WORKSPACE** (Local)
 - > Attached Storage Accounts
 - > Attached Database Accounts

Editor (Main Area):

config.php

```
1 <?php
2 // PHP Data Objects(PDO) Sample [Code]:
3 try {
4     $conn = new PDO("sqlsrv:server = tcp:dbhospitalserver.database.windows.net,1433; Database = myhms");
5     $conn->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
6 }
7 catch (PDOException $e) {
8     print("Error connecting to SQL Server.");
9     die(print_r($e));
10}
11
12 // SQL Server Extension Sample [Code]:
13 $connectionInfo = array("UID" => "dbadmin", "pwd" => "Azure*123", "Database" => "myhmsdb", "LoginTimeout" => 60);
14 $serverName = "tcp:dbhospitalserver.database.windows.net,1433";
15 $conn = sqlsrv_connect($serverName, $connectionInfo);
16 ?>
```

Bottom Navigation:

- PROBLEMS
- OUTPUT
- DEBUG CONSOLE
- TERMINAL**
- PORTS
- AZURE

TERMINAL

```
/dev/fd/13:18: command not found: compdef
souhir@macbook hosp %
```

A screenshot of a dark-themed code editor, likely Visual Studio Code, displaying a PHP file named `func.php`. The code handles user login by connecting to a SQL Server database and performing a query to check if the provided email and password match a record in the `patreg` table.

```
<?php
session_start();
error_reporting(E_ALL);
ini_set('display_errors', '1');
include 'config.php';

try {
    $conn = new PDO("sqlsrv:server = tcp:dbhospitalserver.database.windows.net,1433; Database = myhmsdb", "dbadmin", "Azure*123");
    $conn->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
}
catch (PDOException $e) {
    print("Error connecting to SQL Server.");
    die(print_r($e));
}

if(isset($_POST['patsub'])){
    $email=$_POST['email'];
    $password=$_POST['password2'];
    $query="select * from patreg where email='$email' and password='$password';";
    $result = $conn->query($query);
}
```

The editor interface includes a top bar with tabs for other files like `config.php`, `admin-panel.php`, `contact.php`, `logout.php`, `func2.php`, and `newfunc.php`. Below the tabs is a search bar containing the text `hosp`. The bottom navigation bar includes links for PROBLEMS, OUTPUT, DEBUG CONSOLE, TERMINAL, PORTS, and AZURE. A terminal window at the bottom shows the command `/dev/fd/13:18: command not found: compdef` and the prompt `souhir@macbook hosp %`.

5. Test :

The screenshot shows a web browser window with multiple tabs open. The active tab is for a hospital website at azureweb22.azurewebsites.net. The page displays a 'Welcome' message on the left and a 'Register as Patient' form on the right. The form includes fields for First Name (H), Last Name (I), Email (HI@etudiant-fst.utm.tn), Phone Number (1350097580), Password (two masked fields), and Gender (Male selected). A 'Matched' status is shown next to the second password field. Below the form are links for 'Already have an account?' and 'Register'. The browser's address bar also shows other tabs like 'NetworkWatcherRG - Microsoft' and 'myhmsdb (dbhospitalserver/m)'.

GLOBAL HOSPITALS

HOME ABOUT US CONTACT

Patient Doctor Receptionist

Welcome

Register as Patient

H I

HI@etudiant-fst.utm.tn 1350097580

.....

Male Female

Already have an account?

Matched

Register

azurewe22.azurewebsites.net

NetworkWatcherRG - Microsoft dbhospitalserver - Microsoft myhmsdb (dbhospitalserver/m) azurewe22 - Microsoft Azure HMS Incognito

NetworkWatcherRG - Microsoft Azure | dbhospitalserver - Microsoft Azure | myhmsdb (dbhospitalserver) | azureweb22 - Microsoft Azure | azureweb22.azurewebsites.net

azurewebsit... Incognito

Global Hospital Logout

Welcome

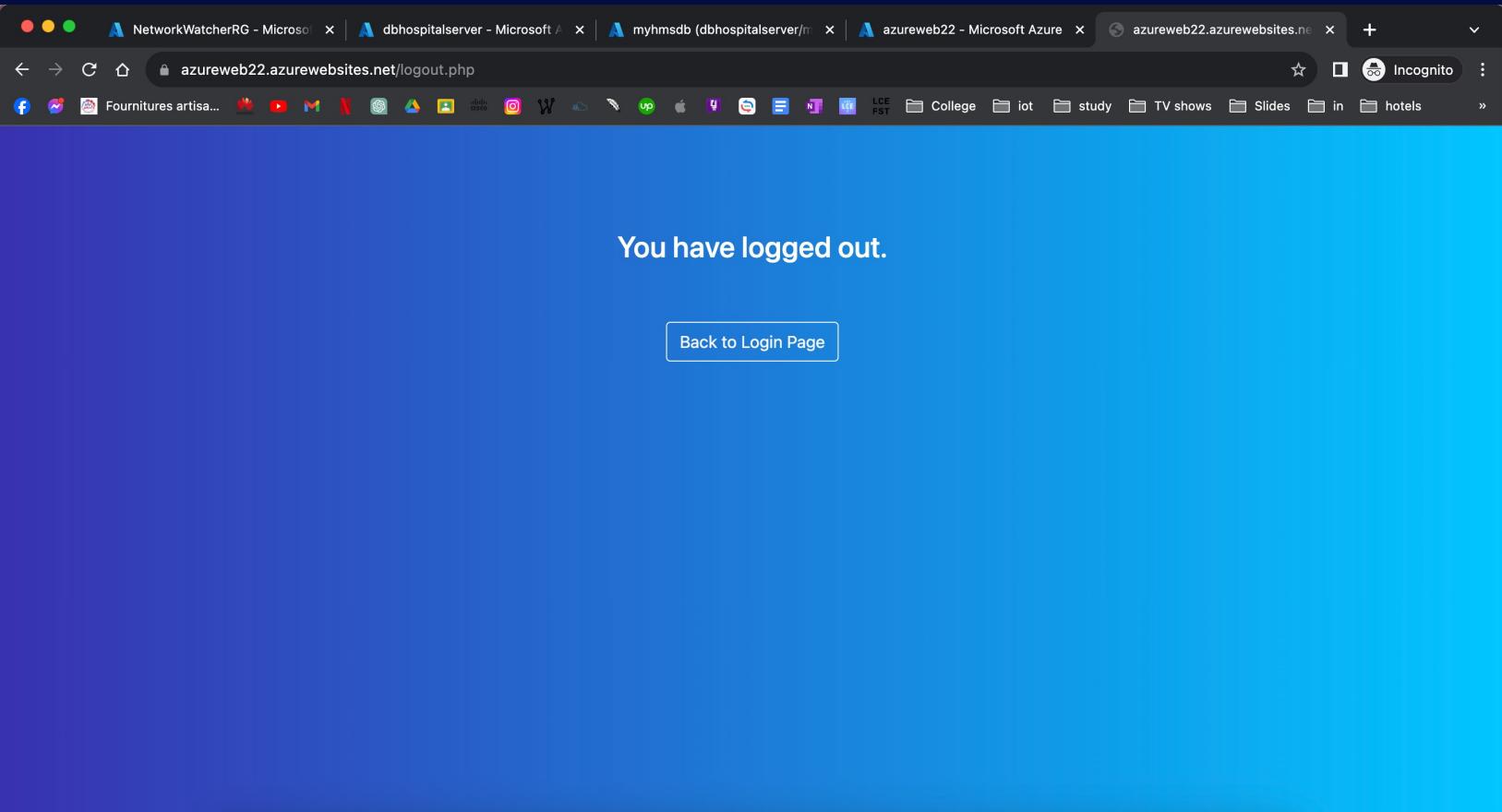
Dashboard

- Book Appointment
- Appointment History
- Prescriptions

Book My Appointment

My Appointments

Prescriptions



GLOBAL HOSPITALS

HOME ABOUT US CONTACT

We are here for you!

Patient Login

Email-ID:

Password:

Login

The screenshot shows a web browser window with a blue header bar containing several tabs. The active tab is 'azureweb22.azurewebsites.net/index1.php'. The page content has a blue gradient background. On the left side, there is a small logo icon and the text 'We are here for you!'. In the center, there is a white rectangular login form with rounded corners. The form is titled 'Patient Login' in bold. It contains two input fields: one for 'Email-ID' with the placeholder 'enter email ID' and another for 'Password' with the placeholder 'enter password'. Below the password field is a blue 'Login' button. At the top of the page, there is a navigation bar with links for 'HOME', 'ABOUT US', and 'CONTACT'.

Microsoft Azure Search resources, services, and docs (G/) wafakatar8@gmail.com RÉPERTOIRE PAR DÉFAUT

Home > Resource groups > azureweb22_group > myhmsdb (dbhospitalserver/myhmsdb)

myhmsdb (dbhospitalserver/myhmsdb) | Query editor (preview)

SQL database

Search Login New Query Open query Feedback Getting started

Overview Activity log Tags Diagnose and solve problems Query editor (preview)

myhmsdb (dbadmin)

Showing limited object explorer here. For full capability please click here to open Azure Data Studio.

Query 1 Run Cancel query Save query Export data as Show only Editor

1 `SELECT * FROM patreg;`

Tables dbo.adminintb dbo.appointmenttb dbo.contact dbo.doctb dbo.patreg dbo.prestb

Views Stored Procedures

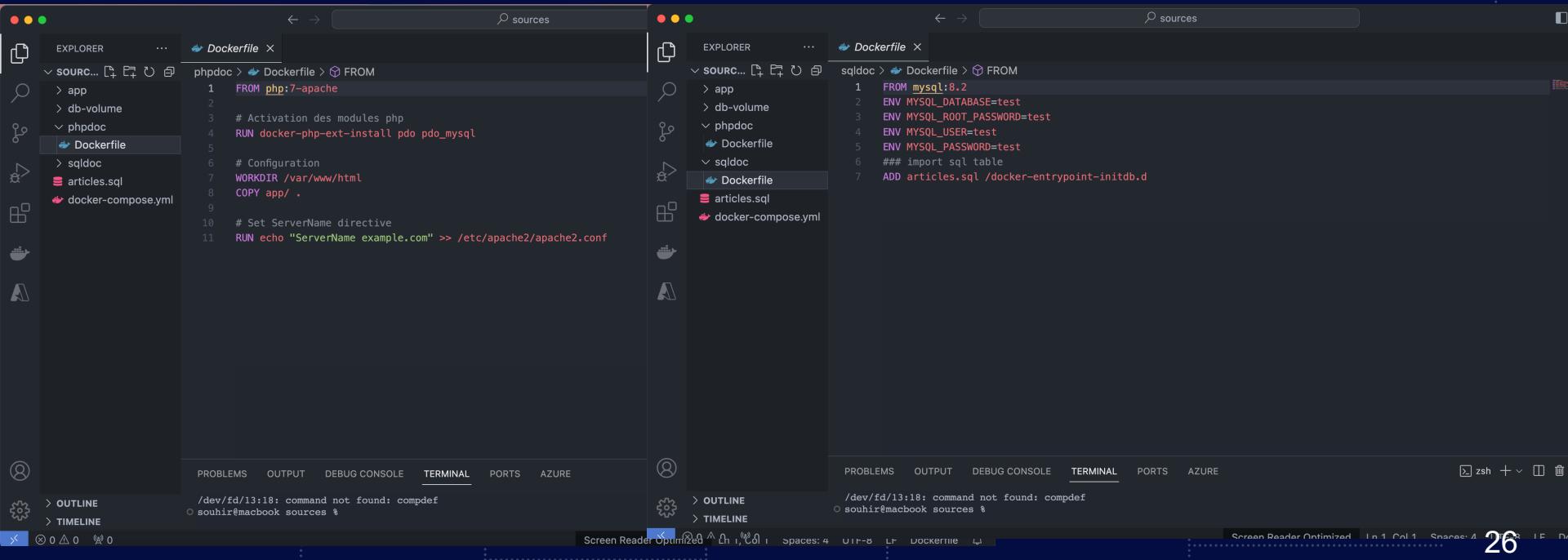
Results Messages

5	sw	W	Male	sefe@gmail.com	1350097580	00000000	
6	sw	W	Male	sefe@gmail.com	1350097580	00000000	
7	sw	W	Male	sefe@gmail.com	1350097580	00000000	
8	sw	W	Male	souhirwalha03@gm...	1350097580	123456789	
9	JBDHBJFD	KJNDKJBF	Male	souhirwalha05@gm...	1350097580	00000000	
11	H	I	Male	HI@etudiant-fst.utm...	1350097580	00000000	

Query succeeded | 0s

DÉPLOYER UNE APPLICATION WEB À PARTIR D'AZURE CONTAINER INSTANCE (ACI) EN UTILISANT AZURE CONTAINER REGISTRY (ACR)

1. Création des Dockerfiles :



The image shows two side-by-side instances of Microsoft Visual Studio Code (VS Code) running on a Mac OS X desktop. Both instances have dark themes and are displaying Dockerfiles.

Left Instance (Web Application Container):

- File Structure:** Explorer sidebar shows a project structure with 'app', 'db-volume', 'phpdoc' (containing 'Dockerfile'), 'sqldoc', 'articles.sql', and 'docker-compose.yml'.
- Dockerfile Content:**

```
FROM php:7-apache
# Activation des modules php
RUN docker-php-ext-install pdo pdo_mysql
# Configuration
WORKDIR /var/www/html
COPY app/ .
# Set ServerName directive
RUN echo "ServerName example.com" >> /etc/apache2/apache2.conf
```

Right Instance (Database Container):

- File Structure:** Explorer sidebar shows a project structure with 'app', 'db-volume', 'phpdoc' (containing 'Dockerfile'), 'sqldoc', 'articles.sql', and 'docker-compose.yml'.
- Dockerfile Content:**

```
FROM mysql:8.2
ENV MYSQL_DATABASE=test
ENV MYSQL_ROOT_PASSWORD=test
ENV MYSQL_USER=test
ENV MYSQL_PASSWORD=test
### Import sql table
ADD articles.sql /docker-entrypoint-initdb.d
```

Both VS Code instances have their standard interface elements at the bottom, including tabs for PROBLEMS, OUTPUT, DEBUG CONSOLE, TERMINAL, PORTS, and AZURE, along with status bars showing file paths and system information.

2. Crédit de AZURE CONTAINER REGISTRY (ACR):

The screenshot shows the Microsoft Azure portal interface for managing a Container Registry named 'tpweb'. The left sidebar navigation includes 'Home', 'tpweb' (selected), 'Quick start', 'Events', 'Settings' (with options like 'Access keys', 'Encryption', 'Identity', 'Networking', 'Microsoft Defender for Cloud', 'Properties', and 'Locks'), and 'Services' (with 'Repositories' selected, 'Webhooks', and 'Geo-replications'). The main content area displays two repository entries: 'mysql_db' and 'myweb_app'. Each entry has a 'Cache Rule' column with 'Artifact streaming' status set to 'Active' (indicated by a green checkmark). A search bar at the top allows filtering of repositories.

Repositories ↑	Cache Rule	Artifact streaming
mysql_db		Active
myweb_app		Active

3. Création des images Docker à partir de Dockerfiles et les publier dans Azure Container Registry (ACR):

```
souhir@macbook ~ % az login
[
[A web browser has been opened at https://login.microsoftonline.com/organizations/oauth2/v2.0/authorize. Please continue the login in the web browser. If no web browser is available or if the web browser fails to open, use device code flow with `az login --use-device-code`.
[
  {
    "cloudName": "AzureCloud",
    "homeTenantId": "dbd6664d-4eb9-46eb-99d8-5c43ba153c61",
    "id": "68e156d8-d921-4656-9822-db3838fd0fe4",
    "isDefault": true,
    "managedByTenants": [],
    "name": "Azure for Students",
    "state": "Enabled",
    "tenantId": "dbd6664d-4eb9-46eb-99d8-5c43ba153c61",
    "user": {
      "name": "oualhasouhir@issatm.u-carthage.tn",
      "type": "user"
    }
  }
]
souhir@macbook ~ % az acr login --name webcont
Login Succeeded
souhir@macbook ~ % sudo docker images
Password:
REPOSITORY          TAG        IMAGE ID      CREATED       SIZE
db_image            latest     babb23a1d8a9  12 hours ago  622MB
php_image           latest     72fc73baaadc  13 hours ago  505MB
docker/welcome-to-docker  latest   648f93a1ba7d  3 weeks ago   19MB
souhir@macbook ~ % az acr login --name webcontreg
Login Succeeded
```

```
[souhir@macbook ~ % docker tag php_image webcontreg.azurecr.io/php_image
[souhir@macbook ~ % docker push webcontreg.azurecr.io/php_image
Using default tag: latest
The push refers to repository [webcontreg.azurecr.io/php_image]
68521c7649e6: Pushed
98be778fb983: Pushed
7411d12c41b7: Pushed
817fbac6b957: Pushed
f68f230dd575: Pushed
95df1534b444: Pushed
57f98ba838aa: Pushed
15d703f5bc12: Pushed
81d981d761ce: Pushed
952c73c7ad3c: Pushed
90867d0da86a: Pushed
b2f3add5bb27: Pushed
4aad40cd499b: Pushed
4a9b2f3b684b: Pushed
323963f5801b: Pushed
acef1b1c001e: Pushed
latest: digest: sha256:746dd9a4161dfe8edebb98b0b2814b655e2fa3725d469aa2d981a2552db2fd9b size: 3665
[souhir@macbook ~ % docker tag ph_image webcontreg.azurecr.io/php_image
Error response from daemon: No such image: ph_image:latest
[souhir@macbook ~ % docker tag db_image webcontreg.azurecr.io/db_image
[souhir@macbook ~ % docker push webcontreg.azurecr.io/db_image
Using default tag: latest
The push refers to repository [webcontreg.azurecr.io/db_image]
f3fd2bca4962: Pushed
484a9239a160: Pushed
60881a8cc619: Pushed
855ace31b698: Pushed
5b5efa882b3f: Pushed
dd5e71bd724c: Pushed
b8eedcd8e6843: Pushed
57131b673ab1: Pushed
ab43e2b85120: Pushed
3dd67e0995d4: Pushed
03486b619b8a: Pushed
latest: digest: sha256:765eab3a6b33f47bdf63e11c4bf04bfc5d8b19612df4d58e4753e19a9872a063 size: 2619
```

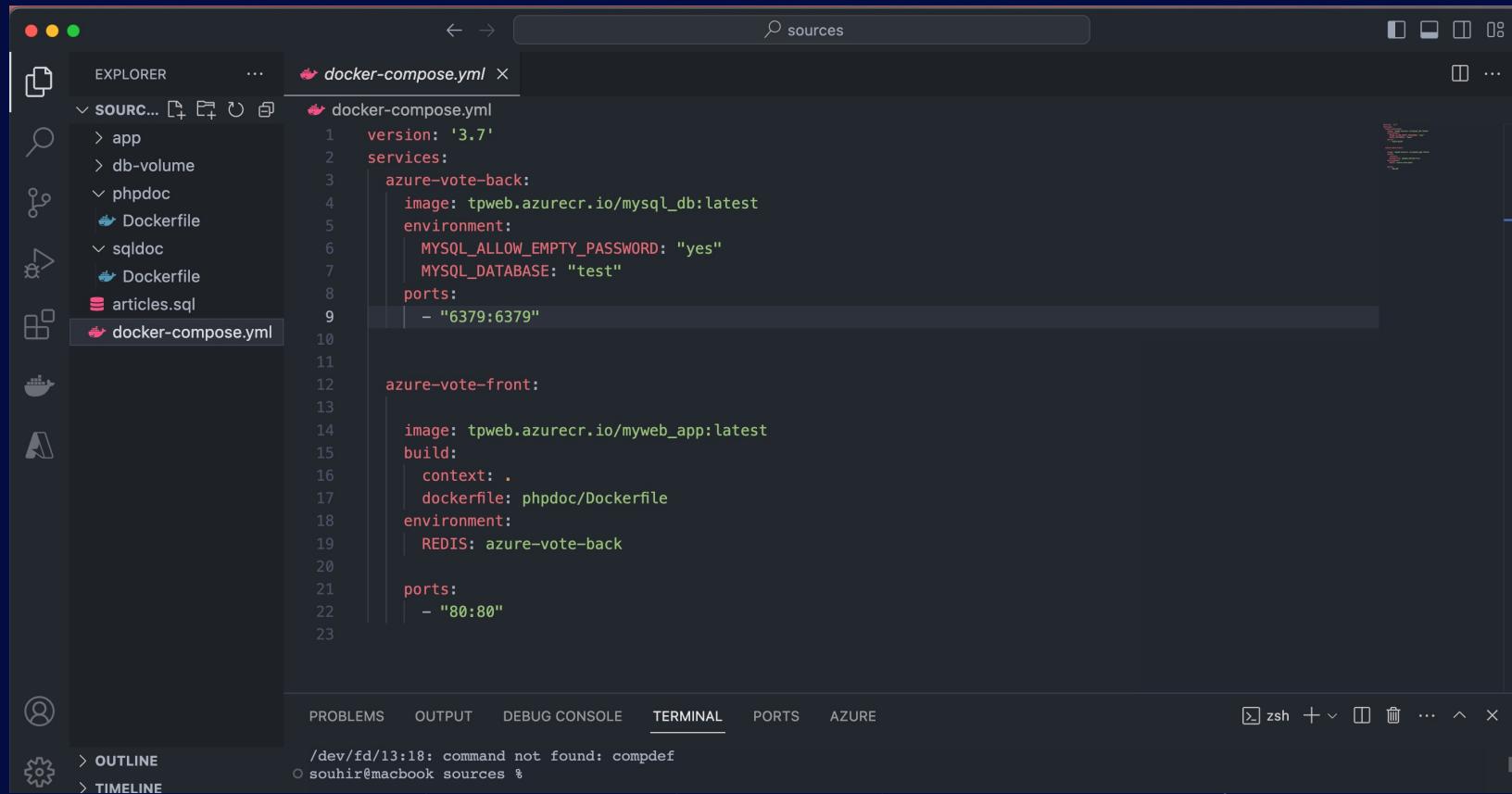


4. Crédit AZURE CONTAINER REGISTRY (ACR):

The screenshot shows the Microsoft Azure portal interface for managing a Container Registry named 'tpweb'. The left sidebar navigation includes 'Home', 'tpweb' (selected), 'Quick start', 'Events', 'Settings' (with options like 'Access keys', 'Encryption', 'Identity', 'Networking', 'Microsoft Defender for Cloud', 'Properties', and 'Locks'), and 'Services' (with 'Repositories' selected, showing 'Webhooks' and 'Geo-replications' options). The main content area displays the 'tpweb | Repositories' page, which lists two repositories: 'mysql_db' and 'myweb_app'. Each repository has a 'Cache Rule' column showing 'Artifact streaming' status as 'Active' with a green checkmark. The top navigation bar shows the URL 'portal.azure.com/#@mesrs.tn/resource/subscriptions/68e156d8-d921-465...', and the top right corner shows the user's name 'oualhasouhir@issatm.u...' and 'MINISTÈRE DE L'ENSEIGNEMENT...'. The browser toolbar at the top includes various icons for file operations, search, and extensions.

Repositories ↑	Cache Rule	Artifact streaming
mysql_db		Active
myweb_app		Active

5. Docker-compose.yml :



```
version: '3.7'
services:
  azure-vote-back:
    image: tpweb.azurecr.io/mysql_db:latest
    environment:
      MYSQL_ALLOW_EMPTY_PASSWORD: "yes"
      MYSQL_DATABASE: "test"
    ports:
      - "6379:6379"

  azure-vote-front:
    image: tpweb.azurecr.io/myweb_app:latest
    build:
      context: .
      dockerfile: phpdoc/Dockerfile
    environment:
      REDIS: azure-vote-back
    ports:
      - "80:80"
```

The screenshot shows a dark-themed code editor interface with a sidebar on the left containing icons for Explorer, Search, Open, and Outline/Timeline. The main area displays a file named 'docker-compose.yml' with the following content:

```
version: '3.7'
services:
  azure-vote-back:
    image: tpweb.azurecr.io/mysql_db:latest
    environment:
      MYSQL_ALLOW_EMPTY_PASSWORD: "yes"
      MYSQL_DATABASE: "test"
    ports:
      - "6379:6379"

  azure-vote-front:
    image: tpweb.azurecr.io/myweb_app:latest
    build:
      context: .
      dockerfile: phpdoc/Dockerfile
    environment:
      REDIS: azure-vote-back
    ports:
      - "80:80"
```

The code editor has tabs for PROBLEMS, OUTPUT, DEBUG CONSOLE, TERMINAL, PORTS, and AZURE. The TERMINAL tab is active, showing the command '/dev/fd/13:18: command not found: compdef' and the prompt 'souhir@macbook sources %'. The bottom right corner features a vertical color bar with yellow, green, and blue squares.

6. Création AZURE CONTAINER REGISTRY (ACR):

```
souhir@macbook ~ % clear

souhir@macbook ~ % docker context create aci myaci1
Docker Compose's integration for ECS and ACI will be retired in November 2023. Learn more: https://docs.docker.com/go/compose-ecs-eol/
Using only available subscription : Azure for Students (68e156d8-d921-4656-9822-db3838fd0fe4)
? Select a resource group create a new resource group
Resource group "e1888c44-b6dd-2930-4ba6-9778c43dc118" (eastus) created
Successfully created aci context "myaci1"
souhir@macbook ~ % docker use myaci1
Docker Compose's integration for ECS and ACI will be retired in November 2023. Learn more: https://docs.docker.com/go/compose-ecs-eol/
unknown docker command: "use"
souhir@macbook ~ % docker context use myaci1
Docker Compose's integration for ECS and ACI will be retired in November 2023. Learn more: https://docs.docker.com/go/compose-ecs-eol/
myaci1
Current context is now "myaci1"
souhir@macbook ~ %
```

```
souhir@macbook sources % docker-compose down
docker-compose up -d --build

[+] Running 3/3
✓ Container azure-vote-front  Removed          1.2s
✓ Container azure-vote-back   Removed          1.4s
✓ Network sources_default    Removed          0.1s
[+] Running 3/3
✓ Network sources_default    Created          0.0s
✓ Container azure-vote-back  Started          0.1s
✓ Container azure-vote-front Started          0.1s
```

```
souhir@macbook sources % docker-compose ps

NAME           IMAGE                  COMMAND             SERVICE          CREATED         STATUS          PORTS
azure-vote-back  tpweb.azurecr.io/mysql_db:latest "docker-entrypoint.s..."  azure-vote-back  2 minutes ago  Up 2 minutes  3306/tcp, 33060/tcp, 0.0.0
.0:6379->6379/tcp
azure-vote-front tpweb.azurecr.io/myweb_app:latest "docker-php-entrypoi..."  azure-vote-front  2 minutes ago  Up 2 minutes  0.0.0.0:80->80/tcp
```

7. Exécution d'une commande à l'intérieur du conteneur Docker en cours d'exécution "azure-vote-back"

```
souhir@macbook sources % docker-compose exec azure-vote-back mysql -uroot -p

Enter password:
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 8
Server version: 8.2.0 MySQL Community Server - GPL

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> show databases;
+--------------------+
| Database          |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| sys                |
| test               |
+--------------------+
5 rows in set (0.06 sec)

mysql> use test;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
```



Docker Desktop Upgrade plan

Search: resaur

souhir... ⚙️

sources /Users/souhir/Desktop/untitled folder/sources

Open **Stop** **Remove**

azur... back <tpweb.azurecr.io/my> Running 6379:6379

azur... front <tpweb.azurecr.io/my> Running 8081:80

EXT **+ sources-myweb_a...** <tpweb.azurecr.io/my> Running 8082:80

sources-mysq... db <tpweb.azurecr.io/my> Running

Docker Compose's integration for ECS and ACI will be retired in November 2023. Learn more: <https://docs.docker.com/go/compose-ecs-eol/>
Command "compose logs" not available in current context (myaci). "not implemented"

Notifications

(HTTP code 500) server error - driver failed programming external connectivity on endpoint timestamper-frontend-1
(9f6f16b964ff0b01d0b26c23643a080a0eac4bf77
29dc78ae85cc63023239f4d): Bind for 0.0.0:6379 failed: port is already allocated
30 minutes ago

RAM 3.88 GB CPU 14.67% Disk 52.23 GB avail. of 62.67 GB Signed in v4.26.0

33

8. AZURE CONTAINER INSTANCE (ACI):

The screenshot shows the Microsoft Azure Container Instances (ACI) dashboard. The left sidebar includes links for Overview, Activity log, Access control (IAM), Tags, Settings (selected), Containers (selected), Identity, Properties, Locks, Monitoring, Metrics, Alerts, Automation, and CLI / PS. The main content area displays three container instances:

Name	Image	State	Previous state	Start time	Restart count
azure-vote-back	tpweb.azurecr.io/mysql_db:latest	Waiting	Terminated		24
azure-vote-front	tpweb.azurecr.io/myweb_app:latest	Waiting	Terminated		24
aci-dns--sidecar	docker/aci-hostnames-sidecar:1.0	Running	-	2023-12-06T01:19:23.851Z	0

Below the table, there are tabs for Events (selected), Properties, Logs, and Connect. The Events section shows the following log entries:

Name	Type	First timestamp	Last timestamp	Message	Count
Killing	Normal	12/6/2023, 02:19:29 AM GMT...	12/6/2023, 03:04:12 AM GM...	Killing container with id 4d2a...	25
Started	Normal	12/6/2023, 02:19:24 AM GMT...	12/6/2023, 03:04:07 AM GM...	Started container	25
Pulled	Normal	12/6/2023, 02:19:15 AM GMT...	12/6/2023, 02:19:15 AM GM...	Successfully pulled image "tp...	1
Pulling	Normal	12/6/2023, 02:18:47 AM GMT...	12/6/2023, 02:18:47 AM GM...	pulling image "tpweb.azurecr...	1

Merci pour votre attention

Brun

