

**ST10445158**

**CLDV6211 POE PART 1**

**Letlhogonolo Kgatshe**

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Deploying applications in the cloud differs from on-premises deployment in several areas:

## Security:

- ***On-Premises***: Organizations have direct control over their data, hardware, and software platforms. Thereby allowing them to have full control over security measures. This control comes with the responsibility of maintaining and updating these measures. This setup can offer a higher level of security. Since the organization can put as many layers of protection around their servers and software as they need. It is also less dependent on your internet connection (EventPro Software, 2025)
- ***Cloud***: Data is stored on remote servers managed by third-party providers. Cloud deployment operates under a shared responsibility model. The organization is responsible for securing their applications. This includes data, and configurations within the cloud. Which may introduce concerns regarding data security and privacy. Cloud deployment can offer enhanced security for organizations with limited in-house security resources. While reputable cloud providers implement robust security measures. The shared platform model can introduce security vulnerabilities (SailPoint Technologies, 2024).

## Deployment Speed:

- ***On-Premises***: Deploying applications requires procuring and setting up physical hardware, installing software. Configuring networks, which can be time-consuming and delay time-to-market. On-premises deployment often involves slower processes due to the need to procure hardware. Set up servers, and configure networks, which can take days or even weeks. This delay can hinder rapid application deployment (Flower & Karjian, 2024)
- ***Cloud***: Cloud computing software and resources typically don't take long to install. A key asset especially when time is of the essence. Companies avoid excess time. Costs involved in long installations associated with on-premises infrastructures. allows for instant resource provisioning. This enables organizations to deploy applications within minutes. Cloud providers offer on-demand access to virtual machines, containers, and other resources. Cloud providers offer on-demand access to virtual machines, containers, and other resources (Flower & Karjian, 2024)

## Resource Management:

- On-Premises: Organizations must invest in and maintain their own hardware and infrastructure. This leads to higher capital expenditures and potential underutilization of resources. Resource management also differs markedly between the two models. On-premises deployment requires organizations to manage all resources manually. This includes hardware maintenance, software updates, and scaling based on demand. This approach involves upfront capital expenditure (CapEx). Purchasing servers and other infrastructure may lead to underutilization during low-demand. For example, a company launching a new product might need to invest in additional servers. This is to handle expected traffic, which could remain idle afterward, increasing costs (SailPoint Technologies, 2024).
- Cloud: Cloud providers manage the underlying infrastructure. Thereby allowing organizations to scale resources up or down based on demand. This pay-as-you-go model enhances financial flexibility. This reduces the risk of overprovisioning or underutilizing resources. Cloud deployment, on the other hand, offers automatic scaling and a pay-as-you-go operational expenditure (OpEx) model. This allows organizations to adjust resources dynamically. This flexibility ensures efficient resource utilization and cost savings. Netflix exemplifies this benefit, using AWS to scale their infrastructure in response to fluctuating streaming demands. This scalability is particularly advantageous for businesses with variable workloads (SailPoint Technologies, 2024).

## Infrastructure as a Service (IaaS):

IaaS (Infrastructure as a Service): Infrastructure as a service, or IaaS, delivers on-demand infrastructure resources to organizations via the cloud (Google Cloud, 2025). Such as virtual machines, storage, and networks. Users have control over operating systems, applications, and data. The cloud provider manages the underlying hardware and virtualization. This model is suitable for organizations needing significant control over their infrastructure. Such as those with specific OS or software requirements (SailPoint Technologies, 2024). Users are responsible for managing operating systems, applications, and data.

- *Example:* AWS EC2 and Google Compute Engine

## Platform as a Service (PaaS):

PaaS (Platform as a Service): PaaS, delivers and manages all the hardware and software resources to develop applications through the cloud (Google Cloud, 2025). It provides tools for development, testing, deployment, and scaling. Thereby allowing users to focus on application code and data. Customers still must write the code and manage their data and applications (Google Cloud, 2025). PaaS is ideal for developers looking to streamline the development process. This reduces operational overhead (SailPoint Technologies, 2024). It includes development tools, operating systems, and middleware managed by the provider.

- *Example:* Heroku, Google App Engine, and AWS Elastic Beanstalk

## Software as a Service (SaaS):

SaaS (Software as a Service): SaaS delivers software applications over the internet on a subscription basis. The provider manages the infrastructure, platform, and application. Users access the software via a web browser without installation or maintenance. Most SaaS applications are accessed directly through a web browser. (Google Cloud, 2025) SaaS is designed for end-users needing ready-to-use software, not for building new applications (SailPoint Technologies, 2024).

- *Example:* Salesforce for CRM and Google Workspace for productivity tools Microsoft Office 365.

## **Why PaaS is Beneficial:**

- **Faster Development and Deployment:** PaaS enables development teams to spin up development. This includes testing, and production environments in minutes, rather than weeks or months. Thereby accelerating the application's time-to-market (IBM, 2021).
- **Cost Efficiency:** While initially more expensive than IaaS, PaaS can save money over time. This is done by reducing infrastructure management overhead and optimizing resource use. PaaS solutions often include built-in cloud cost optimization features. Such as automatic scaling and resource allocation. This leads to more efficient resource use and lower overall cloud spending (DigitalOcean, 2025).
- **Scalability:** PaaS allow for scaling the application seamlessly as demand grows. This happens without the need to manage the underlying infrastructure (DigitalOcean, 2025).
- **Focus on Application Development:** By handling infrastructure management, PaaS allows developers to concentrate on building and improving application features. This ensures a more robust and user-friendly platform (IBM, 2021).

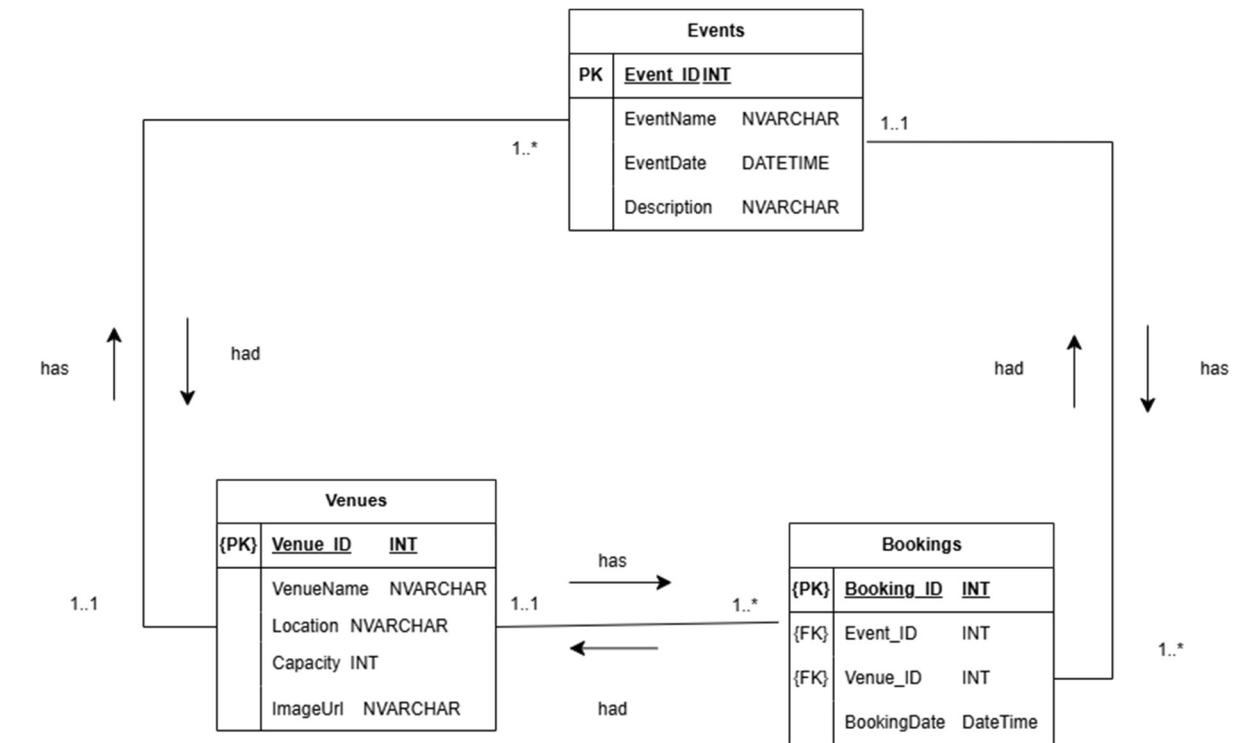
[Link to online Azure Web Page](#)

<https://st10445158-erg5f5e5amcdfmcb.southafricanorth-01.azurewebsites.net/>

[Link to GitHub](#)

[https://github.com/VCCT-CLDV6211-2025-G1/ST10445158\\_CLDV6211\\_POE\\_PART1](https://github.com/VCCT-CLDV6211-2025-G1/ST10445158_CLDV6211_POE_PART1)

## ERD Diagram



# Creation of SQL Database and Successful Deployment

The screenshot shows the Microsoft Azure portal interface for creating a new SQL database. The top navigation bar includes the Microsoft logo, a search bar, and user information (ST10445158@vcconne... ADVTECH LTD.). The main title is "Create SQL Database".

**Subscription:** ADVTECH-Tertiary Varsity College

**Resource group:** AZ-JHB-RSG-VCWCCN-ST10445158-TER

**Database details:**

- Database name:** st10445158-db
- Server:** st10445158 (South Africa North)
- Want to use SQL elastic pool?**: No (selected)
- Workload environment:** Development (selected)

**NOTES:** Serverless databases are billed in vCore seconds based on a combination of CPU and memory utilization. [Learn more about serverless billing](#).

**Compute + storage:** General Purpose - Serverless (Standard-series (Gen5), 1 vCore, 32 GB storage, zone redundant disabled). [Configure database](#)

**Backup storage redundancy:** Locally-redundant backup storage (selected)

**Review + create** | **Next : Networking >**

Create SQL Database - Microsoft Azure | Varsity College | https://portal.azure.com/#create/Microsoft.SQLDatabase

Microsoft Azure | Search resources, services, and docs (G+) | Copilot | ST10445158@vcconnect... ADVTECH LTD.

## Create SQL Database

Networking

Configure network access and connectivity for your server. The configuration selected below will apply to the selected server 'st10445158' and all databases it manages. [Learn more](#)

**Firewall rules**

The settings displayed below are read-only. They can be modified from the "Firewalls and virtual networks" blade for the selected server after database creation. [Learn more](#)

Allow Azure services and resources to access this server  No  Yes

Add current client IP address \*  No  Yes

**Private endpoints**

Private endpoint connections are associated with a private IP address within a Virtual Network. The list below shows all the private endpoint connections for this server. Note that private endpoint connections are defined at the server level and they provide access to all databases in the server. [Learn more](#)

+ Add private endpoint

Name	Subscription	Resource group	Region	Subnet

[Review + create](#) [< Previous](#) [Next : Security >](#)

**Cost summary**

General Purpose (GP_S_Gen5_1)	0.16
Cost per GB (in USD)	0.16
Max storage selected (in GB)	x 41.6
ESTIMATED STORAGE COST / MONTH 6.73 USD	
COMPUTE COST / VCORE SECOND 0.000204 USD	

**NOTES**

1 Serverless databases are billed in vCore seconds based on a combination of CPU and memory utilization. [Learn more about serverless billing](#)

Create SQL Database - Microsoft Azure | Varsity College | https://portal.azure.com/#create/Microsoft.SQLDatabase

Microsoft Azure | Search resources, services, and docs (G+) | Copilot | ST10445158@vcconnect... ADVTECH LTD.

## Create SQL Database

Security

Protect your data using Microsoft Defender for SQL, a unified security package including vulnerability assessment and advanced threat protection for your server. [Learn more](#)

Get started with a 30 day free trial period, and then 15.75 USD/server/month.

Enable Microsoft Defender for SQL \*  Start free trial  Not now

**Ledger**

Ledger cryptographically verifies the integrity of your data and detects any tampering that might have occurred. [Learn more](#)

Ledger **Not configured** [Configure ledger](#)

**Server identity**

[Review + create](#) [< Previous](#) [Next : Additional settings >](#)

**Cost summary**

General Purpose (GP_Gen5_2)	232.92
Cost per vCore (in USD)	232.92
vCores selected	x 2
Cost per GB (in USD)	0.16
Max storage selected (in GB)	x 41.6
ESTIMATED COST / MONTH 472.56 USD	

Create SQL Database - Microsoft Azure | Varsity College + https://portal.azure.com/#create/Microsoft.SQLDatabase

Microsoft Azure | Search resources, services, and docs (G+) | Copilot | ST10445158@vcconnect... ADVTECH LTD.

Home > Create SQL Database ...

Basics Networking Security Additional settings Tags Review + create

Customize additional configuration parameters including collation & sample data.

**Data source**

Start with a blank database, restore from a backup or select sample data to populate your new database.

Use existing data \*  None  Backup  Sample

**Database collation**

Database collation defines the rules that sort and compare data, and cannot be changed after database creation. The default database collation is SQL\_Latin1\_General\_CI\_AS. [Learn more](#)

Collation \*  SQL\_Latin1\_General\_CI\_AS [Find a collation](#)

**Maintenance window**

Select a preferred maintenance window from the drop-down. During maintenance, databases remain available, but some updates may require a failover. The system default maintenance window (5pm to 8am) limits most activities to this time,

Cost summary

General Purpose (GP_Gen5_2)	
Cost per vCore (in USD)	232.92
vCores selected	x 2
Cost per GB (in USD)	0.16
Max storage selected (in GB)	x 41.6
ESTIMATED COST / MONTH	
472.56 USD	

Review + create < Previous Next : Tags >

Create SQL Database - Microsoft Azure | Varsity College + https://portal.azure.com/#create/Microsoft.SQLDatabase

Microsoft Azure | Search resources, services, and docs (G+) | Copilot | ST10445158@vcconnect... ADVTECH LTD.

Home > Create SQL Database ...

Basics Networking Security Additional settings Tags Review + create

Tags are name/value pairs that enable you to categorize and view consolidated billing by applying the same tag to multiple resources and resource groups. [Learn more](#)

Note that if you create tags and then change resource settings on other tabs, your tags will be automatically updated.

Name	Value	Resource
<input type="text"/>	:	<input type="text"/> SQL database

Cost summary

General Purpose (GP_Gen5_2)	
Cost per vCore (in USD)	232.92
vCores selected	x 2
Cost per GB (in USD)	0.16
Max storage selected (in GB)	x 41.6
ESTIMATED COST / MONTH	
472.56 USD	

Review + create < Previous Next : Review + create >

Create SQL Database - Microsoft | Varsity College +

https://portal.azure.com/#create/Microsoft.SQLDatabase

Microsoft Azure Search resources, services, and docs (G+) Copilot ST10445158@vcconnect... ADVTECH LTD.

Home > Create SQL Database ...

Basics Networking Security Additional settings Tags Review + create

Product details

SQL database by Microsoft

Estimated cost per month 472.56 USD

Terms

By clicking "Create", I (a) agree to the legal terms and privacy statement(s) associated with the Marketplace offering(s) listed above; (b) authorize Microsoft to bill my current payment method for the fees associated with the offering(s), with the same billing frequency as my Azure subscription; and (c) agree that Microsoft may share my contact, usage and transactional information with the provider(s) of the offering(s) for support, billing and other transactional activities. Microsoft does not provide rights for third-party offerings. For additional details see [Azure Marketplace Terms](#).

Basics

Subscription ADvTECH-Tertiary Varsity College

Resource group AZ-JHB-RSG-VCWCCN-ST10445158-TER

Region southafricanorth

Create < Previous Download a template for automation

Cost summary

General Purpose (GP_Gen5_2)	232.92
Cost per vCore (in USD)	
vCores selected	x 2
Cost per GB (in USD)	0.16
Max storage selected (in GB)	x 41.6
ESTIMATED COST / MONTH	472.56 USD

Create SQL Database - Microsoft | Varsity College +

https://portal.azure.com/#create/Microsoft.SQLDatabase

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Home > Create SQL Database ...

Subscription ADvTECH-Tertiary Varsity College

Resource group AZ-JHB-RSG-VCWCCN-ST10445158-TER

Region southafricanorth

Database name st10445158-db

Server st10445158

Compute + storage General Purpose: Standard-series (Gen5), 2 vCores, 32 GB storage, zone redundant disabled

Backup storage redundancy Locally-redundant backup storage

Networking

Allow Azure services and resources to access this server No

Private endpoint None

Security

Transparent data encryption (Server level) Service-managed key selected

Create < Previous Download a template for automation

The screenshot shows the 'Create SQL Database' wizard in Microsoft Azure. The 'Security' section displays the following configuration:

Setting	Value
Transparent data encryption (Server level)	Service-managed key selected
Database level customer-managed key	Not configured
Database level user assigned managed identity	Not configured
Advanced data security	Start free trial
Always Encrypted with secure enclaves	Not configured
Sql Ledger(Database)	Disabled
Digest Storage	Disabled

The 'Additional settings' section includes:

Setting	Value
Use existing data	Blank
Collation	SQL_Latin1_General_CI_AS
Maintenance window	System default (5pm to 8am)

At the bottom, there are 'Tags' and a 'Create' button.

The screenshot shows the 'Deployment Details Blade' for a deployment named 'Microsoft.SQLDatabase.newDatabaseNewServer\_9f1b969de91b43989d693'. The status is 'Deployment succeeded'. Deployment details include:

Item	Value
Deployment name	Microsoft.SQLDatabase.newDatabase...
Start time	2025/03/14, 09:46:24
Subscription	ADYTECH-Tertiary Varsity College
Correlation ID	e6a5128c-0578-42e7-937a-5dea1da9c...
Resource group	AZ-JHB-RSG-VCWCCN-ST10445158-TER

On the right, there are links for 'Cost management', 'Microsoft Defender for Cloud', 'Free Microsoft tutorials', and 'Work with an expert'. The bottom of the screen shows the Windows taskbar with various pinned icons.

# Web Application Creation and Successful Deployment

The screenshot shows the Microsoft Azure 'Create Web App' wizard. The first step, 'Project Details', is completed. The second step, 'Instance Details', is shown with the following configuration:

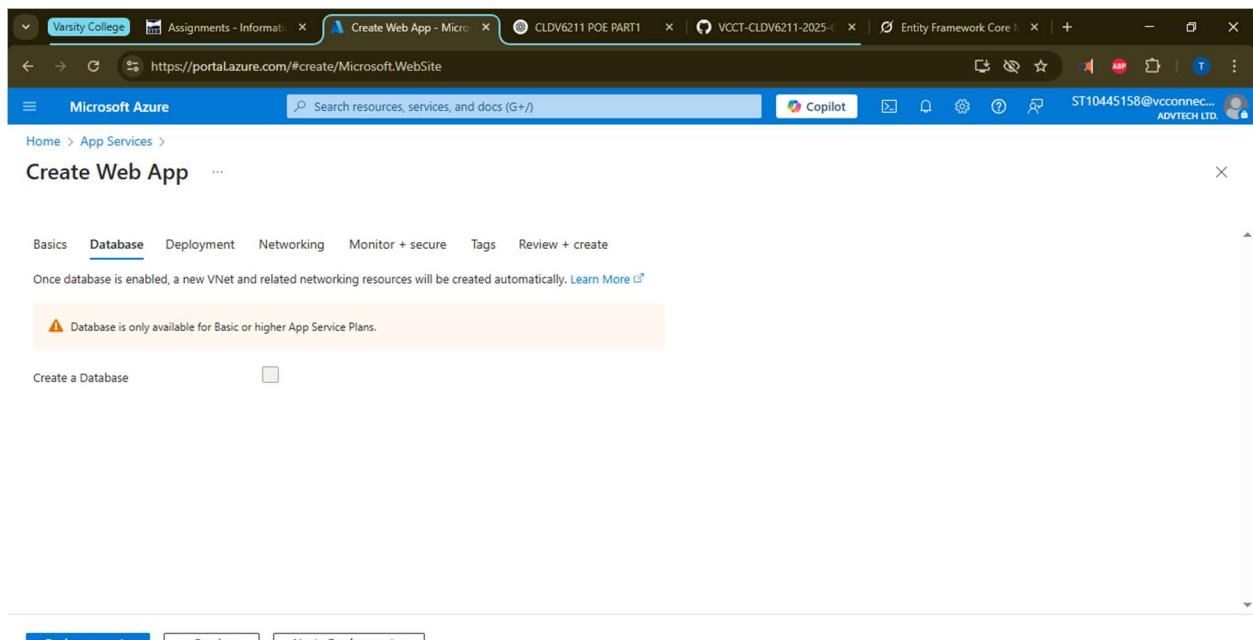
- Name:** ST10445158 -erg5f5e5amcdfmcb.canadacentral-01.azurewebsites.net
- Secure unique default hostname:** Enabled

At the bottom of this step, there are buttons for 'Review + create' and 'Next : Database >'. The browser taskbar at the top shows multiple tabs related to Varsity College assignments and Microsoft services.

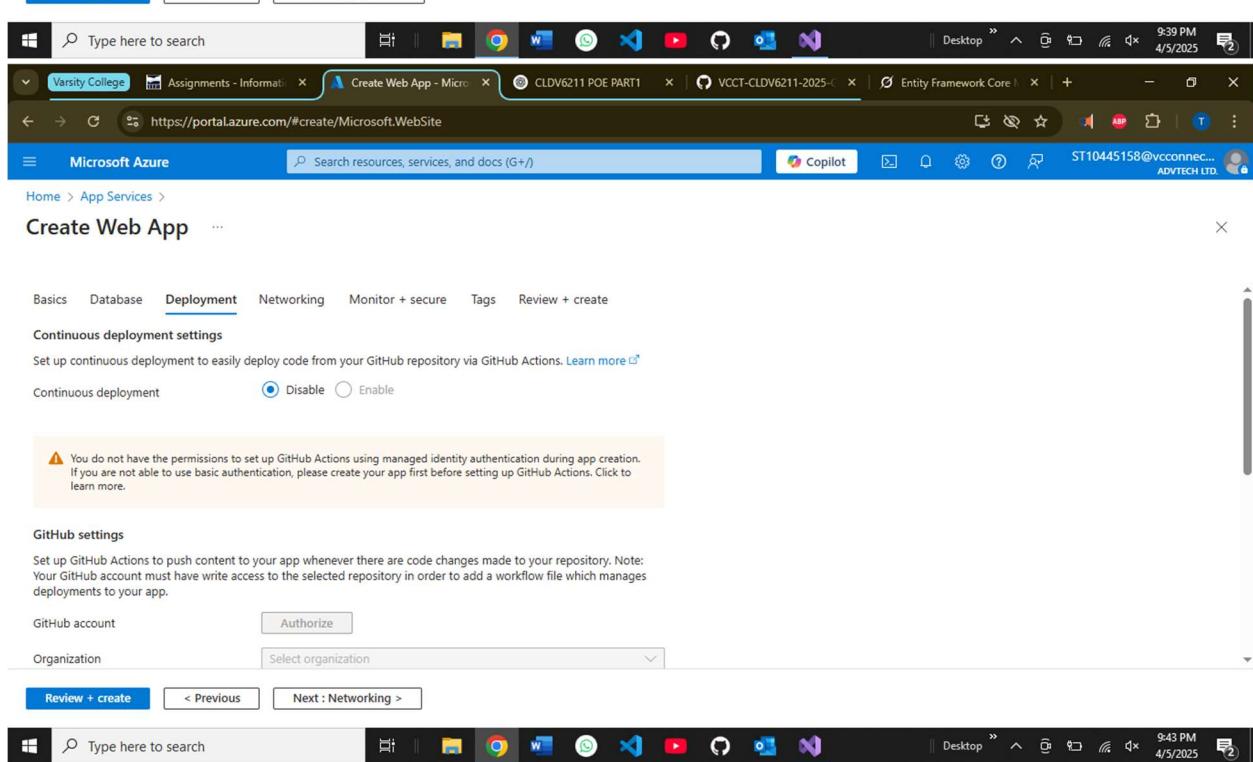
The second screenshot shows the 'Create Web App' wizard in the 'Pricing plans' step. The configuration includes:

- Runtime stack:** .NET 8 (LTS)
- Operating System:** Windows
- Region:** South Africa North
- Pricing plan:** Shared D1 (Shared infrastructure)

At the bottom, there are buttons for 'Review + create' and 'Next : Database >'. The browser taskbar at the top shows the same tabs as the previous screenshot.



The screenshot shows the Microsoft Azure 'Create Web App' interface on the 'Database' tab. The top navigation bar includes tabs for Basics, Database (which is selected), Deployment, Networking, Monitor + secure, Tags, and Review + create. A note states: 'Once database is enabled, a new VNet and related networking resources will be created automatically.' Below this, a warning message says: '⚠️ Database is only available for Basic or higher App Service Plans.' There is a 'Create a Database' button with a checkbox next to it. At the bottom, there are 'Review + create', '< Previous', and 'Next : Deployment >' buttons.

The screenshot shows the Microsoft Azure 'Create Web App' interface on the 'Deployment' tab. The top navigation bar includes tabs for Basics, Database, Deployment (which is selected), Networking, Monitor + secure, Tags, and Review + create. Under 'Continuous deployment settings', it says: 'Set up continuous deployment to easily deploy code from your GitHub repository via GitHub Actions.' A note below says: '⚠️ You do not have the permissions to set up GitHub Actions using managed identity authentication during app creation. If you are not able to use basic authentication, please create your app first before setting up GitHub Actions. Click to learn more.' There is a 'Continuous deployment' section with 'Disable' and 'Enable' radio buttons, where 'Disable' is selected. Below this, there is a 'GitHub settings' section with a 'GitHub account' dropdown and an 'Authorize' button. At the bottom, there are 'Review + create', '< Previous', and 'Next : Networking >' buttons.

The screenshot shows the Microsoft Azure 'Create Web App' interface. The 'Networking' tab is selected. It includes sections for 'Enable public access' (radio button set to 'On') and 'Virtual network integration' (radio button set to 'Off'). A note states that virtual network integration is available in specific service plans. Navigation buttons at the bottom include 'Review + create', '< Previous', and 'Next : Monitor + secure >'.

The screenshot also shows the Windows taskbar at the bottom, displaying various pinned icons like File Explorer, Edge, and Visual Studio Code.

The screenshot shows the Microsoft Azure portal interface for creating a web app. The browser tab is titled 'Create Web App - Microsoft' and the URL is 'https://portal.azure.com/#create/Microsoft.WebSite'. The main content area is titled 'Create Web App' and has a sub-section titled 'Tags'. The 'Tags' tab is selected. Below it, there is a table with three columns: 'Name', 'Value', and 'Resource'. A single row is visible with the name 'Name' and value 'Value'. A note states: 'Tags are name/value pairs that enable you to categorize resources and view consolidated billing by applying the same tag to multiple resources and resource groups.' Another note says: 'Note that if you create tags and then change resource settings on other tabs, your tags will be automatically updated.' At the bottom of the page are buttons for 'Review + create', '< Previous', and 'Next : Review + create >'.

This screenshot shows the 'Review + create' step of the web app creation process. The browser tab is still 'Create Web App - Microsoft' at 'https://portal.azure.com/#create/Microsoft.WebSite'. The main content area is titled 'Create Web App' and has a sub-section titled 'Review + create'. The 'Review + create' tab is selected. The page displays the configuration details for the web app, including the 'Shared sku' (Web App by Microsoft) and a note about basic authentication being disabled. At the bottom are buttons for 'Create', '< Previous', and 'Next >'. The status bar at the bottom right shows the time as 9:45 PM and the date as 4/5/2025.

The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes tabs for 'Varsity College', 'Assignments - Informa...', 'Microsoft.Web-WebApp', 'CLDV6211 POE PART1', 'VCCT-CLDV6211-2025...', 'Entity Framework Core', and others. The main title is 'Microsoft.Web-WebApp-Portal-86b6802d-ad01 | Overview'. The left sidebar has sections for 'Overview' (selected), 'Inputs', 'Outputs', and 'Template'. The main content area displays a green checkmark icon and the message 'Your deployment is complete'. Deployment details are listed: Deployment name: Microsoft.Web-WebApp-Portal-86b68..., Start time: 2025/04/05, 21:47:02; Subscription: ADvTECH-Tertiary Varsity College; Resource group: AZ-JHB-RSG-VCWCCN-ST10445158-TER. Below this are sections for 'Deployment details' (Manage deployments for your app, Recommended) and 'Next steps' (Protect your app with authentication, Recommended). A 'Go to resource' button is present. On the right side, there are promotional cards for 'Cost Management', 'Microsoft Defender for Cloud', 'Free Microsoft tutorials', and 'Work with an expert'. The bottom of the screen shows the Windows taskbar with various pinned icons.

## SQL Sample Data For Venue, Booking and Events

The screenshot shows a Microsoft Azure interface for a SQL database named 'st10445158\_DB'. The left sidebar lists various management options like Overview, Activity log, Tags, and Query editor (preview). The Query editor (preview) is selected and displays a query window titled 'Query 6' containing the following SQL code:

```
1  SELECT TOP (1000) * FROM [dbo].[Venues]
```

The results pane shows a table with three rows of data:

VenueId	VenueName	Location	Capacity	ImageUrl
1	Grand Hall	New York	500	<a href="https://www.theplaza.com">https://www.theplaza.com</a>
2	Skyline Rooftop	Los Angeles	200	<a href="https://res.cloudinary.com">https://res.cloudinary.com</a>
3	Ocean View Conferen...	Miami	350	<a href="https://cdn-fdpbg.net">https://cdn-fdpbg.net</a>

A message at the bottom of the results pane states 'Query succeeded | 0s'.

Two screenshots of the Microsoft Azure Query editor (preview) interface are shown side-by-side.

**Screenshot 1 (Top):**

- The title bar shows "st10445158\_DB (st10445158/st10445158\_DB) | Query editor (preview)".
- The left sidebar has "Query editor (preview)" selected.
- The object explorer shows tables: dbo.BookingHistory, dbo.Bookings, dbo.Events, dbo.Venues.
- The query editor tab "Query 8" is active, displaying the query: `SELECT TOP (1000) * FROM [dbo].[Events]`.
- The results pane shows a table with columns EventId, EventName, EventDate, Description, VenueId, containing three rows:

EventId	EventName	EventDate	Description	VenueId
1	Tech Conference 2025	2025-06-15T00:00:00...	Annual tech industry ...	1
2	Wedding Expo	2025-08-20T00:00:00...	A showcase of weddi...	2
3	Music Festival	2025-09-10T00:00:00...	Live performances fro...	3

**Screenshot 2 (Bottom):**

- The title bar shows "st10445158\_DB (st10445158/st10445158\_DB) | Query editor (preview)".
- The left sidebar has "Query editor (preview)" selected.
- The object explorer shows tables: dbo.BookingHistory, dbo.Bookings, dbo.Events, dbo.Venues.
- The query editor tab "Query 9" is active, displaying the query: `SELECT TOP (1000) * FROM [dbo].[Bookings]`.
- The results pane shows a table with columns BookingId, EventId, VenueId, BookingDate, containing three rows:

BookingId	EventId	VenueId	BookingDate
1	1	1	2025-06-10T00:00:00.0000C
2	2	2	2025-08-15T00:00:00.0000C
3	3	3	2025-09-05T00:00:00.0000C

# SQL Database Creation and Successful Deployment

The screenshot displays two consecutive steps of the 'Create SQL Database' wizard in the Microsoft Azure portal.

**Step 1: Database details**

- Subscription: ADVTECH-Tertiary Varsity College
- Resource group: AZ-JHB-RSG-VCWCCN-ST10445158-TER
- Database name: st10445158-db
- Server: st10445158 (South Africa North)
- Want to use SQL elastic pool?: No
- Workload environment: Development

**Step 2: Compute + storage**

- Workload environment: Development
- Compute + storage: General Purpose - Serverless (Standard-series (Gen5), 1 vCore, 32 GB storage, zone redundant disabled)
- Backup storage redundancy: Locally-redundant backup storage

Both steps include a 'NOTES' section and a 'Review + create' button.

**Create SQL Database - Microsoft Azure** | Varsity College + https://portal.azure.com/#create/Microsoft.SQLDatabase

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Home > SQL databases > Create SQL Database

Networking

Configure network access and connectivity for your server. The configuration selected below will apply to the selected server 'st10445158' and all databases it manages. [Learn more](#)

**Firewall rules**

The settings displayed below are read-only. They can be modified from the "Firewalls and virtual networks" blade for the selected server after database creation. [Learn more](#)

Allow Azure services and resources to access this server  No  Yes

Add current client IP address \*  No  Yes

**Private endpoints**

Private endpoint connections are associated with a private IP address within a Virtual Network. The list below shows all the private endpoint connections for this server. Note that private endpoint connections are defined at the server level and they provide access to all databases in the server. [Learn more](#)

+ Add private endpoint

Name	Subscription	Resource group	Region	Subnet

[Review + create](#) [< Previous](#) [Next : Security >](#)

**Create SQL Database - Microsoft Azure** | Varsity College + https://portal.azure.com/#create/Microsoft.SQLDatabase

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Home > Create SQL Database

Security

Microsoft Defender for SQL

Protect your data using Microsoft Defender for SQL, a unified security package including vulnerability assessment and advanced threat protection for your server. [Learn more](#)

Get started with a 30 day free trial period, and then 15.75 USD/server/month.

Enable Microsoft Defender for SQL \*   Start free trial  Not now

**Ledger**

Ledger cryptographically verifies the integrity of your data and detects any tampering that might have occurred. [Learn more](#)

Ledger **Not configured** [Configure ledger](#)

**Server identity**

[Review + create](#) [< Previous](#) [Next : Additional settings >](#)

Create SQL Database - Microsoft Azure | Varsity College + https://portal.azure.com/#create/Microsoft.SQLDatabase

Microsoft Azure | Search resources, services, and docs (G+) | Copilot | ST10445158@vconne... ADVTECH LTD.

Home > Create SQL Database

Basics Networking Security Additional settings Tags Review + create

Customize additional configuration parameters including collation & sample data.

Data source

Start with a blank database, restore from a backup or select sample data to populate your new database.

Use existing data \*  None  Backup  Sample

Database collation

Database collation defines the rules that sort and compare data, and cannot be changed after database creation. The default database collation is SQL\_Latin1\_General\_CI\_AS. [Learn more](#)

Collation \*  SQL\_Latin1\_General\_CI\_AS [Find a collation](#)

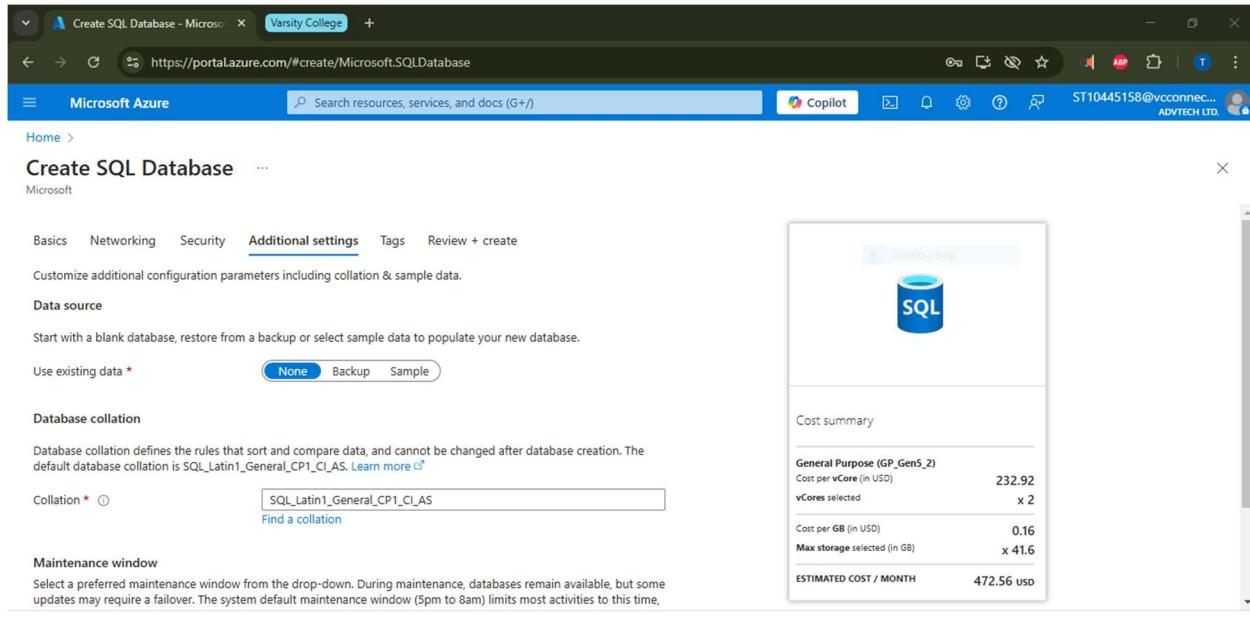
Maintenance window

Select a preferred maintenance window from the drop-down. During maintenance, databases remain available, but some updates may require a failover. The system default maintenance window (5pm to 8am) limits most activities to this time.

Cost summary

General Purpose (GP_Gen5_2)	232.92
Cost per vCore (in USD)	
vCores selected	x 2
Cost per GB (in USD)	0.16
Max storage selected (in GB)	x 41.6
ESTIMATED COST / MONTH	472.56 usd

Review + create < Previous Next : Tags >



Create SQL Database - Microsoft Azure | Varsity College + https://portal.azure.com/#create/Microsoft.SQLDatabase

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Home > Create SQL Database

Subscription ADvTECH-Tertiary Varsity College

Resource group AZ-JHB-RSG-VCWCCN-ST10445158-TER

Region southafricanorth

Database name st10445158-db

Server st10445158

Compute + storage General Purpose: Standard-series (Gen5), 2 vCores, 32 GB storage, zone redundant disabled

Backup storage redundancy Locally-redundant backup storage

Networking

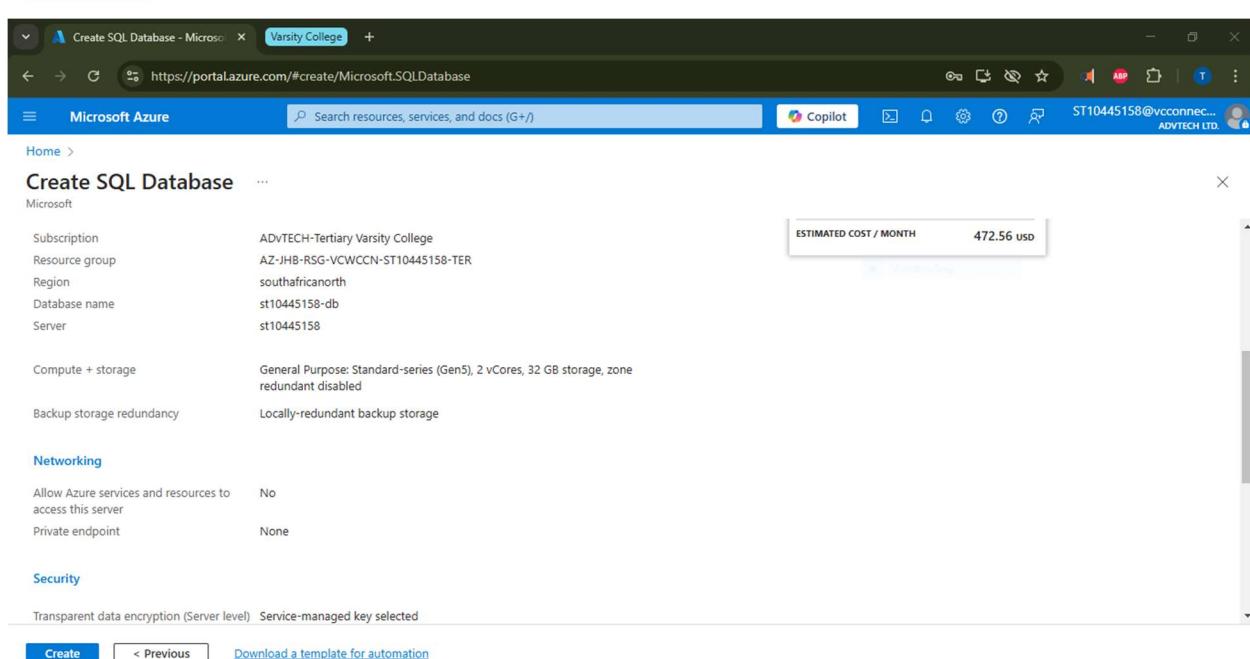
Allow Azure services and resources to access this server No

Private endpoint None

Security

Transparent data encryption (Server level) Service-managed key selected

Create < Previous Download a template for automation



Screenshot of the Microsoft Azure portal showing the 'Create SQL Database' wizard and the deployment overview page.

**Create SQL Database - Microsoft** | Varsity College | Microsoft Azure | https://portal.azure.com/#create/Microsoft.SQLDatabase

**Create SQL Database**

**Security**

Transparent data encryption (Server level)	Service-managed key selected
Database level customer-managed key	Not configured
Database level user assigned managed identity	Not configured
Advanced data security	Start free trial
Always Encrypted with secure enclaves	Not configured
Sql Ledger(Database)	Disabled
Digest Storage	Disabled

**Additional settings**

Use existing data	Blank
Collation	SQL_Latin1_General_CI_AS
Maintenance window	System default (5pm to 8am)

**Tags**

**Microsoft.SQLDatabase.newDatabase** | Varsity College | Microsoft Azure | https://portal.azure.com/#view/HubsExtension/DeploymentDetailsBlade/-/overview/id/%2Fsubscriptions%2Fe31273bf-0dae-4395-a8b5-... | Copilot

**Microsoft.SQLDatabase.newDatabaseNewServer\_9f1b969de91b43989d693 | Overview**

**Your deployment is complete**

Deployment name : Microsoft.SQLDatabase.newDatabase... Start time : 2025/03/14, 09:46:24  
Subscription : ADVTECH-Tertiary Varsity College Correlation ID : e6a5128c-0578-42e7-937a-5dea1da9c...  
Resource group : AZ-JHB-RSG-VCWCCN-ST10445158-TER

**Deployment details**

**Next steps**

**Give feedback**  
[Tell us about your experience with deployment](#)

**Cost management**  
Get notified to stay within your budget and prevent unexpected charges on your bill.  
[Set up cost alerts >](#)

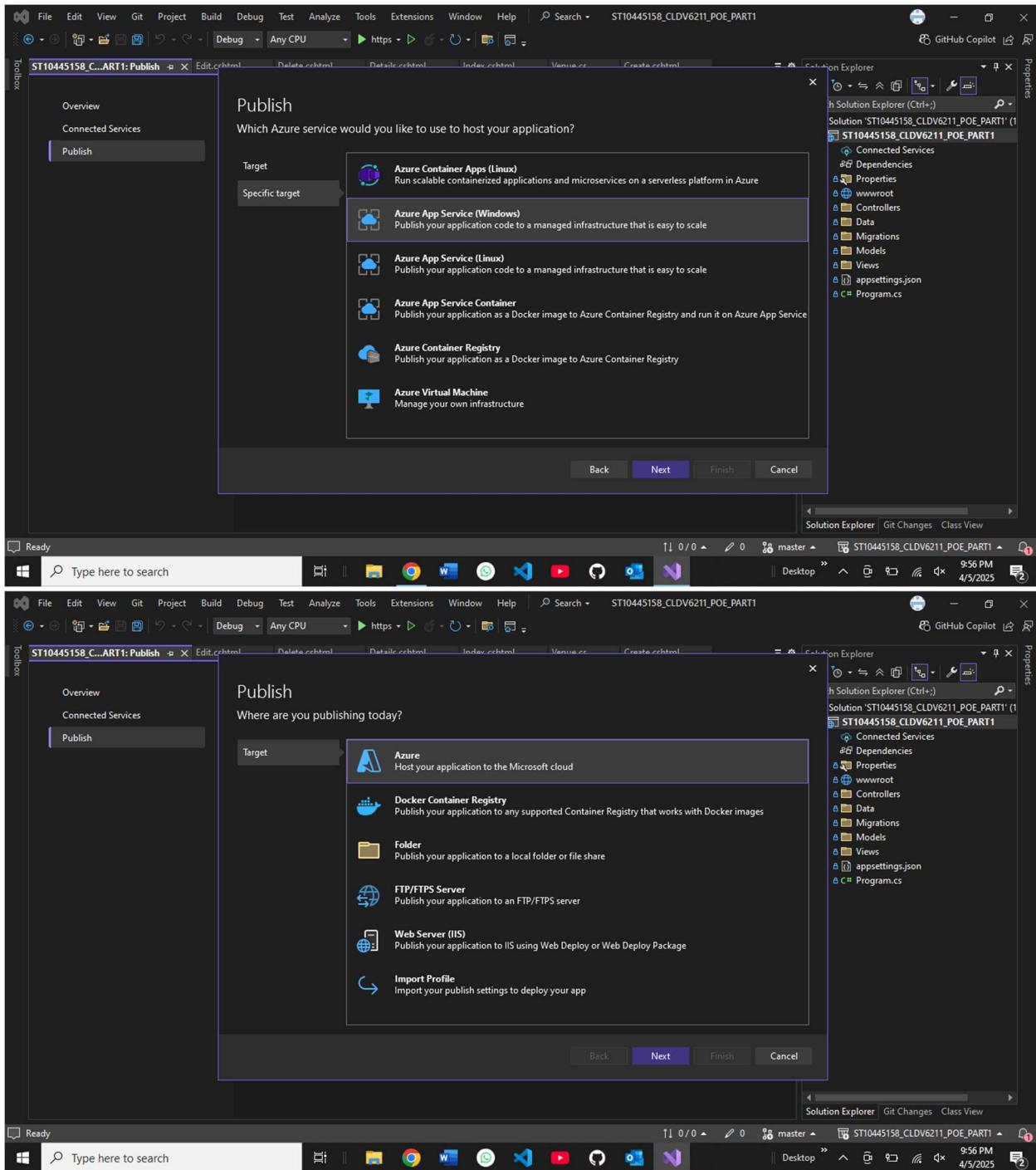
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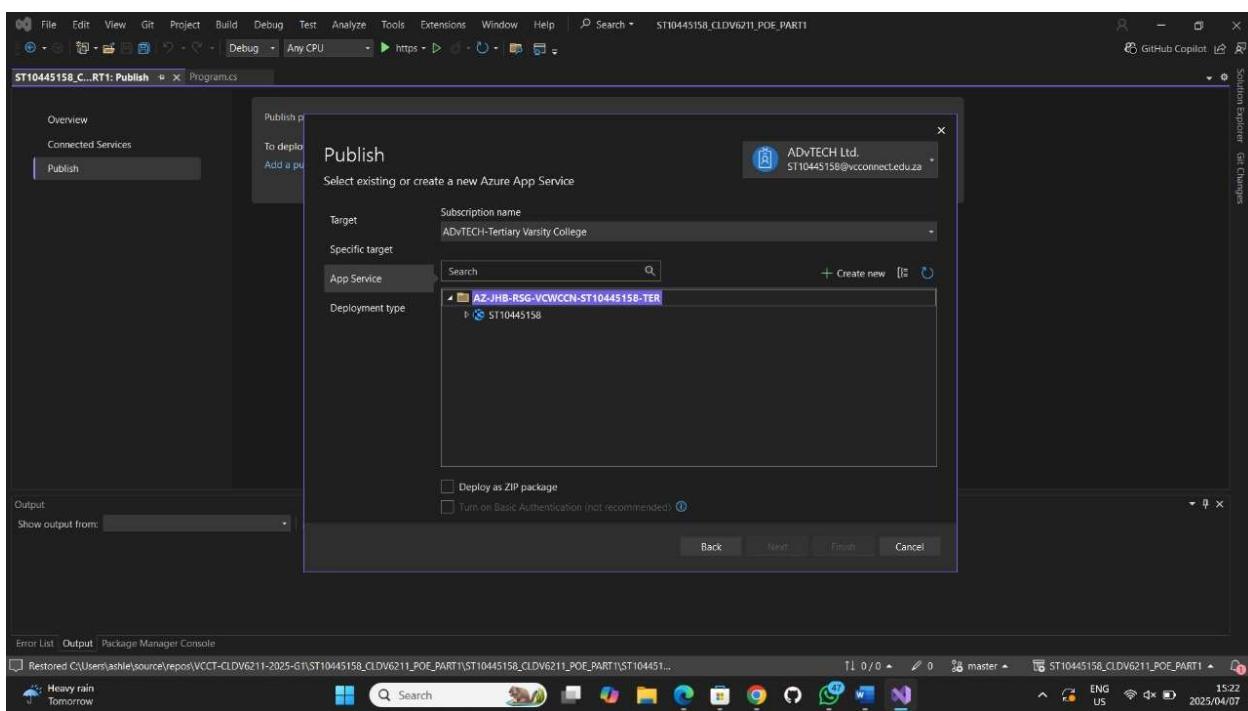
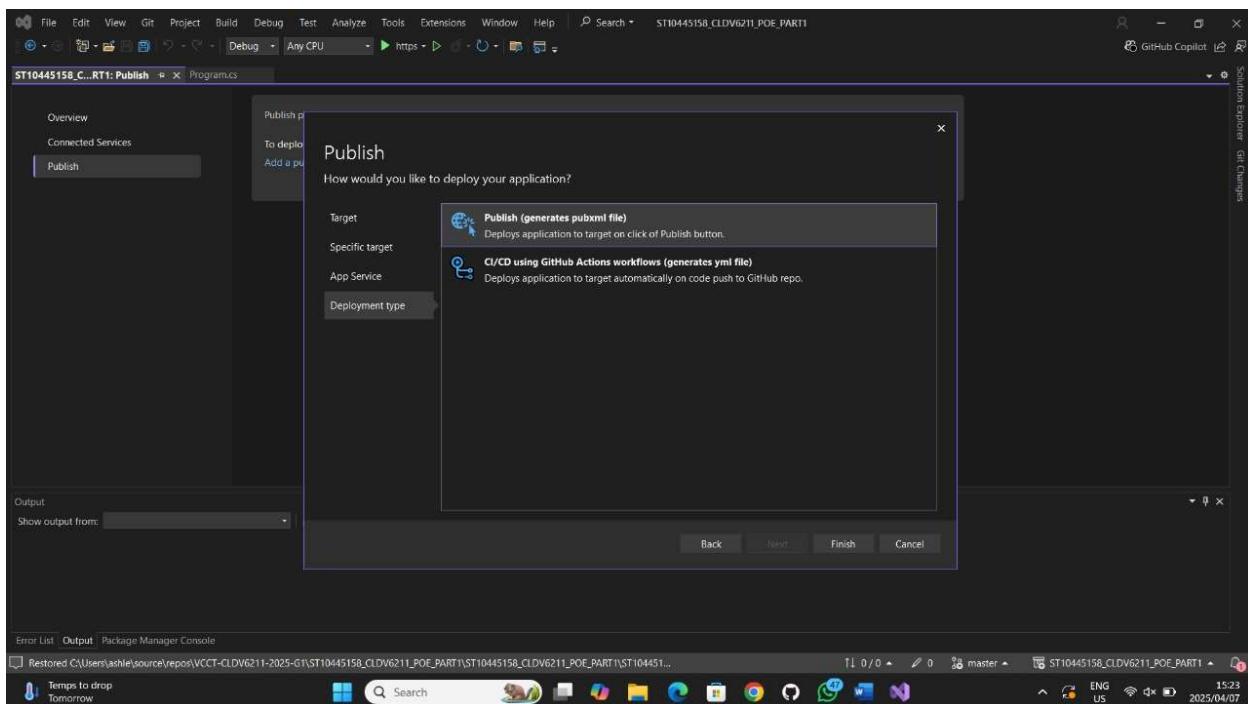
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Azure experts are service provider partners who can help manage your assets on Azure and be your first line of support.

9:48 AM 3/14/2025

## Publish Application online





## Running on Azure

← ⏪ ⏴ st10445158-erg5f5e5amcdfmcb.southafricanorth-01.azurewebsites.net/Events

Varsity College 📚 | YouTube 🎵 | Gmail 📧 | (55) Unboxing 6 Cu...

ST10445158\_CLDV6211\_POE\_PART1 Home Venues Events Bookings Privacy

# Index

[Create New](#)

EventName	EventDate	Description	
Tech Conference 2025	6/15/2025 12:00:00 AM	Annual tech industry conference.	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Wedding Expo	8/20/2025 12:00:00 AM	A showcase of wedding vendors and services.	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Music Festival	9/10/2025 12:00:00 AM	Live performances from top artists.	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Workshop	4/5/2025 8:50:00 PM	PROG6211	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>

© 2025 - ST10445158\_CLDV6211\_POE\_PART1 - [Privacy](#)

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## Running on Local

Home Page - ST10445158\_CLD x +

https://localhost:7088

ST10445158\_CLDV6211\_POE\_PART1 Home Venues Events Bookings Privacy

# Welcome

Effortlessly manage venues, events, and bookings.

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