

# How to set up the environment

>>>>>>>>>>>>>



dev>scope

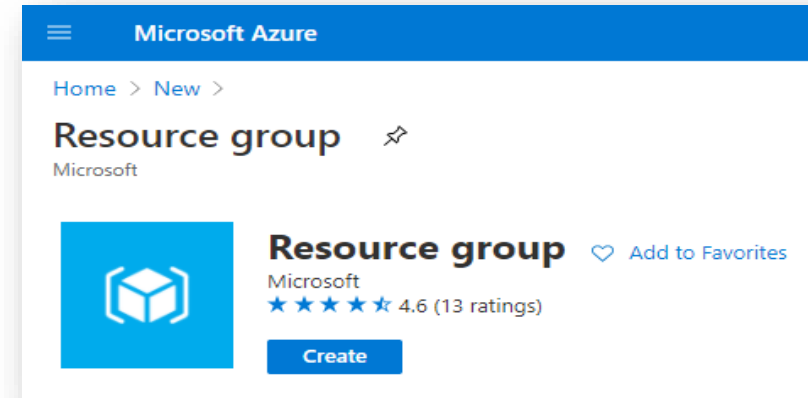


## Step 1 – Create Resource Group

# Step 1 – Create Resource Group

Create a new Resource group resource.

Here you can choose the name for your Resource Group and your region.



### Create a resource group

[Basics](#) [Tags](#) [Review + create](#)

**Resource group** - A container that holds related resources for an Azure solution. The resource group can include all the resources for the solution, or only those resources that you want to manage as a group. You decide how you want to allocate resources to resource groups based on what makes the most sense for your organization. [Learn more](#)

**Project details**

Subscription \* ⓘ

Resource group \* ⓘ

**Resource details**

Region \* ⓘ





Step 2 – Create App Service Plan (OS: Windows) + App Service Web for Back Office

# Step 2 – Create App Service Plan (OS: Windows) + App Service Web for Back Office

Create a new Web App resource.

Here you can create the Web App for the Back Office, using the created Resource Group.

You will need to choose the website URL name, your own region and with the proper configurations shown in the image on the right.

Moreover, here you will need to create a new Windows App Plan, for your region (also shown in the image on the right).

The image displays two screenshots of the Microsoft Azure portal interface.

The left screenshot shows the 'New' page. In the 'Popular' section, the 'Web App' option is highlighted with an orange box. The 'Web App' option includes a link to 'Quickstarts + tutorials'.

The right screenshot shows the 'Create Web App' form. The form includes the following fields and options:

- Project Details:** Subscription (Your Azure subscription), Resource Group (Your resource group).
- Instance Details:** Name (yourbackofficewebsitename), Publish (Code selected), Runtime stack (.NET Core 3.1 (LTS)), Operating System (Linux, Windows selected), Region (West Europe).
- App Service Plan:** Windows Plan (West Europe) selected. A 'Create new' button is highlighted with an orange box.
- Skus and size:** A modal dialog for 'New App Service Plan' is open, showing a 'Name' field with the placeholder 'App Service Plan name' and 'OK' and 'Cancel' buttons.

# Step 2 – Create App Service Plan (OS: Windows) + App Service Web for Back Office

After you create your Windows App service plan, you will need to choose the "Sku and size". We recommend the "Production – S1" plan.

After clicking "Review + Create", go to the "Monitor tab" and choose to use Application Insights. Create a new one.

The Spec Picker interface shows two main categories: Dev / Test (For less demanding workloads) and Production (For most production workloads). The Production category is selected. Below, there are two sections: Recommended pricing tiers and Additional pricing tiers. The S1 plan is highlighted in the Additional pricing tiers section.

Tier	ACU	Memory	Compute Equivalent	Estimated Price (EUR/Month)
P1V2	210 total	3.5 GB	Dv2-Series	123.12
P2V2	420 total	7 GB	Dv2-Series	246.24
P3V2	630 total	10.5 GB	Dv2-Series	369.36
P1V3	195 minimum	8 GB	2 vCPU	83.72
P2V3	195 minimum	16 GB	4 vCPU	167.45
P3V3	195 minimum	32 GB	8 vCPU	334.89
S1	100 total	1.75 GB	A-Series	36.94
S2	200 total	3.5 GB	A-Series	73.87
S3	300 total	5.25 GB	A-Series	110.81

The Microsoft Azure portal shows the "Create Web App" form. The "Monitoring" tab is selected. The "Enable Application Insights" checkbox is checked, and the "Create new" button is highlighted.

Microsoft Azure

Home > New >

### Create Web App

Basics **Monitoring** Tags Review + create

Application Insights is a code-less attach to provide detailed observability in to your application. [Learn more](#)

Application Insights

Enable Application Insights \* ☐ No ☒ Yes

Application Insights \*  [Create new](#)



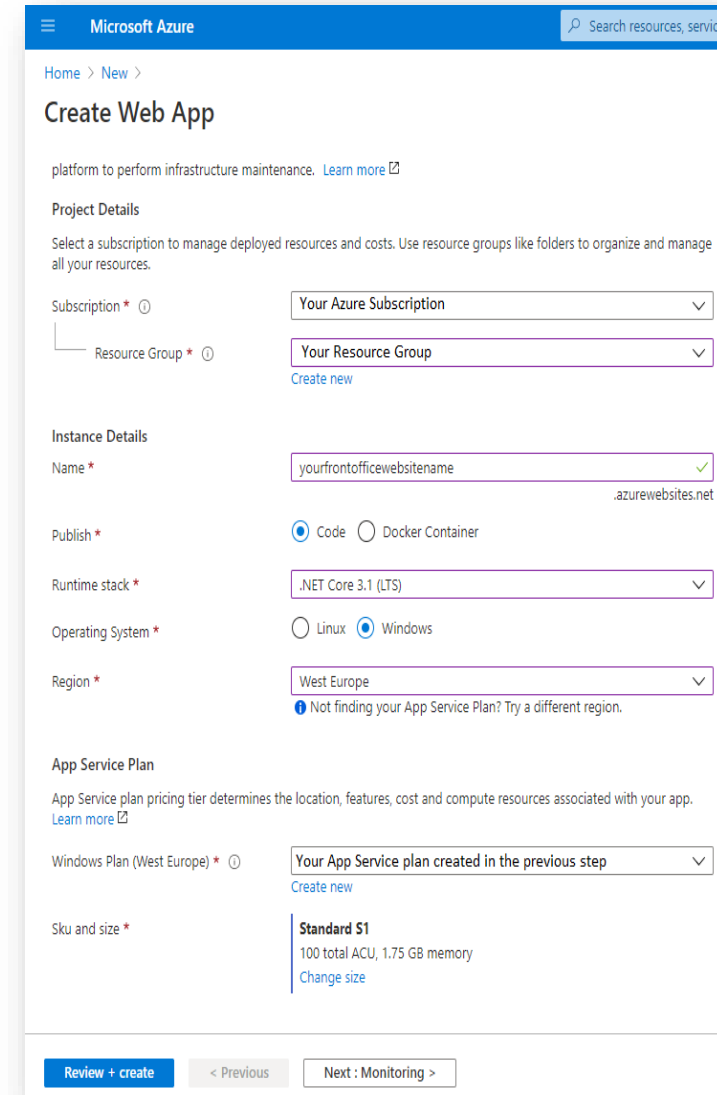
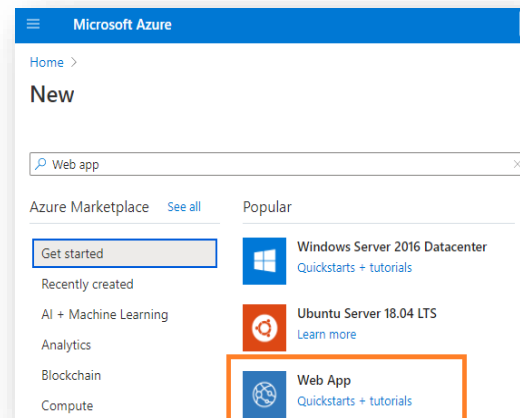


Step 3 – Create App Service Web for Front Office using the created App plan

# Step 3 – Create App Service Web for Front Office using the created App plan

Here you can create the Web App for the Front Office, using the created Resource Group and the App Service plan created in the previous step. You can also choose the name for your Front Office website, as well as the desired region.

All the other configurations can be seen in the image on the right.

This screenshot shows the 'Create Web App' configuration page in the Microsoft Azure portal. The page is titled 'Create Web App' and includes a search bar at the top. The 'Project Details' section shows the 'Subscription' and 'Resource Group' dropdowns, both set to 'Your Azure Subscription' and 'Your Resource Group' respectively. The 'Instance Details' section includes fields for 'Name' (set to 'yourfrontofficewebsitename'), 'Publish' (set to 'Code'), 'Runtime stack' (set to '.NET Core 3.1 (LTS)'), 'Operating System' (set to 'Windows'), and 'Region' (set to 'West Europe'). The 'App Service Plan' section shows the 'App Service Plan' dropdown set to 'Your App Service plan created in the previous step'. The 'Sku and size' section shows the 'Standard S1' plan with 100 total ACU and 1.75 GB memory. The bottom of the page has buttons for 'Review + create', '< Previous', and 'Next : Monitoring >'.

Microsoft Azure

Home > New >

## Create Web App

platform to perform infrastructure maintenance. [Learn more](#)

### Project Details

Select a subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription \*

Resource Group \*   
[Create new](#)

### Instance Details

Name \*  .azurewebsites.net

Publish \* ☒ Code ☐ Docker Container

Runtime stack \*

Operating System \* ☐ Linux ☒ Windows

Region \*   
Not finding your App Service Plan? Try a different region.

### App Service Plan

App Service plan pricing tier determines the location, features, cost and compute resources associated with your app. [Learn more](#)

Windows Plan (West Europe) \*   
[Create new](#)

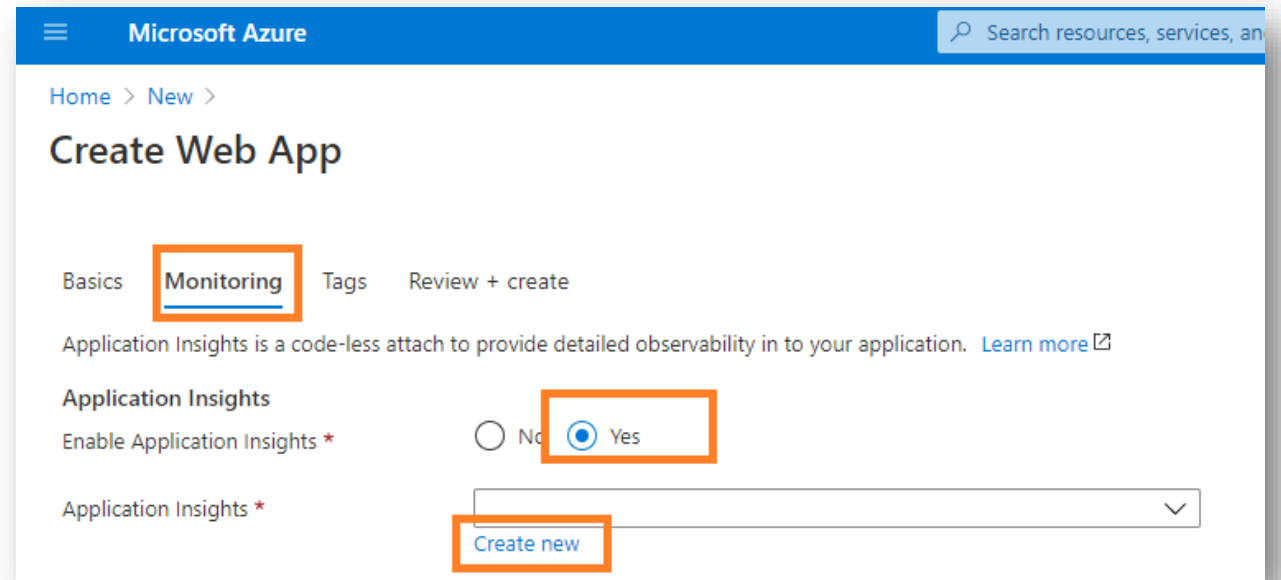
Sku and size \* **Standard S1**  
100 total ACU, 1.75 GB memory  
[Change size](#)

[Review + create](#) [Previous](#) [Next : Monitoring](#)



## Step 3 – Create App Service Web for Front Office using the created App plan

In the same way you created an Application Insights for the Back Office, create one for the Front Office.



The screenshot shows the 'Create Web App' page in the Microsoft Azure portal, specifically the 'Monitoring' tab. The 'Monitoring' tab is highlighted with an orange box. Below the tabs, there is a description of Application Insights and a section for enabling it. The 'Enable Application Insights' section has two radio buttons: 'No' and 'Yes'. The 'Yes' radio button is selected and highlighted with an orange box. Below the radio buttons, there is a dropdown menu for 'Application Insights'. The 'Create new' option is highlighted with an orange box.

Microsoft Azure

Home > New >

### Create Web App

Basics **Monitoring** Tags Review + create

Application Insights is a code-less attach to provide detailed observability in to your application. [Learn more](#)

**Application Insights**

Enable Application Insights \* ☐ No ☒ Yes

Application Insights \*



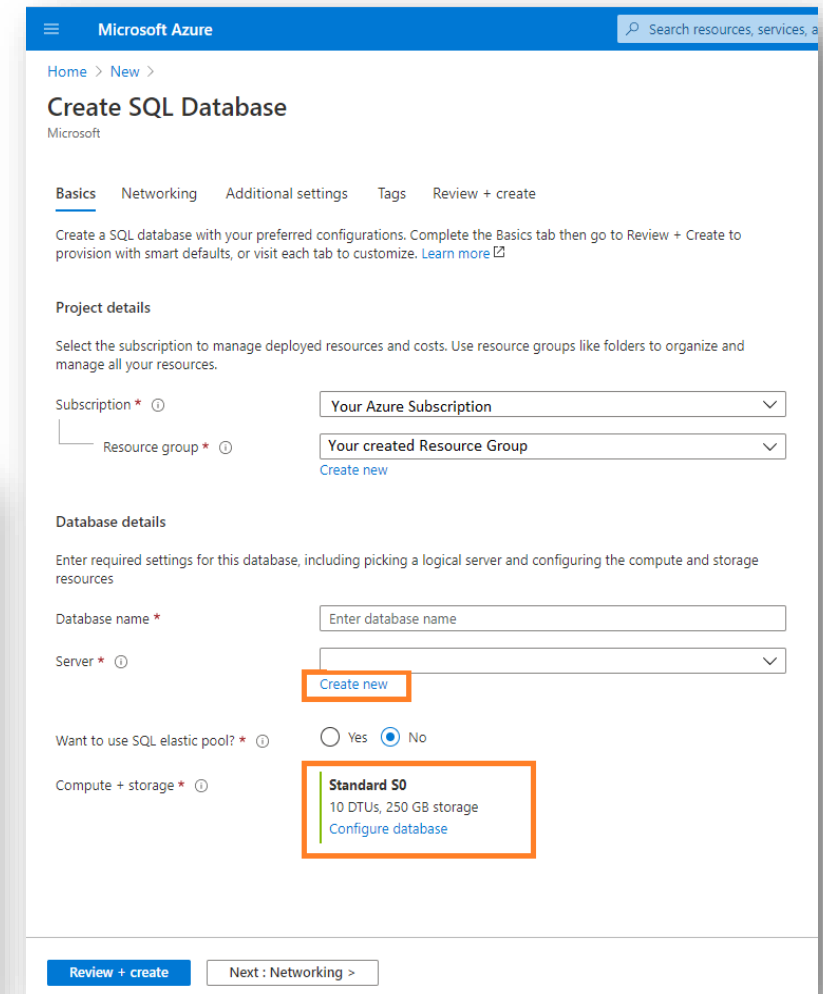
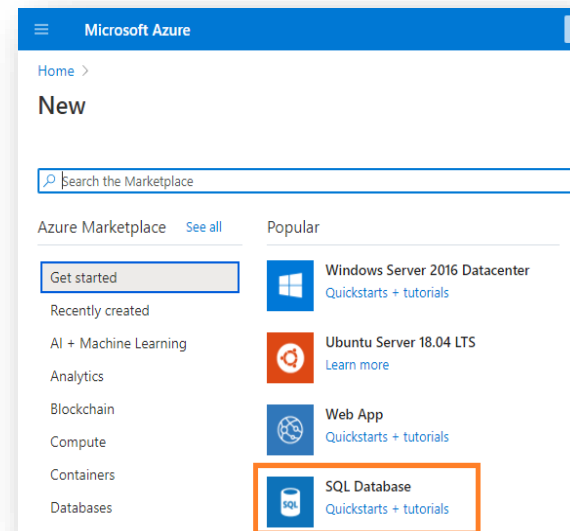
## Step 4 – Create SQL Server + Database

# Step 4 – Create SQL Server + Database

Create a new SQL Database resource.

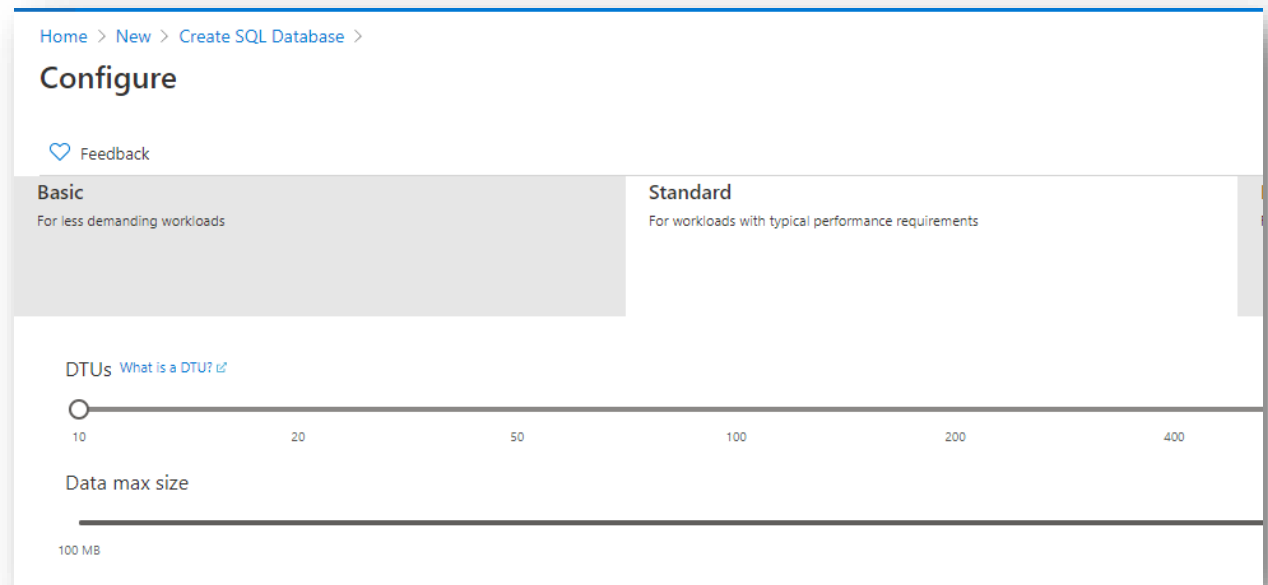
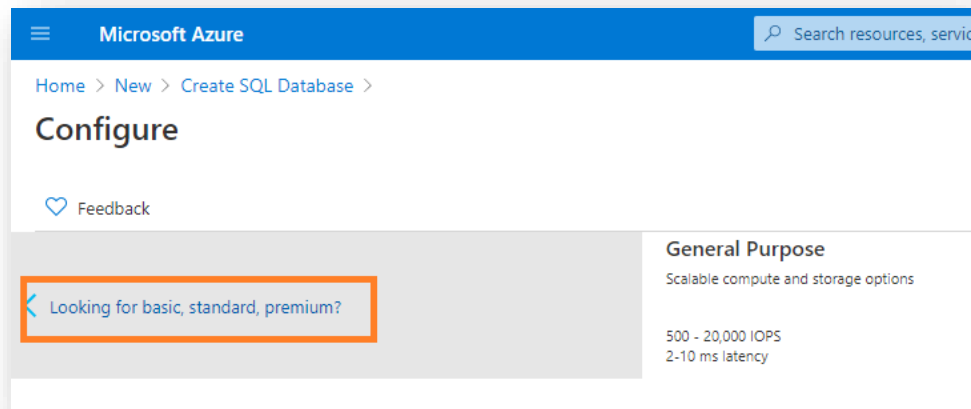
Here, you can choose the name and region for your SQL Database. You will also need to create the SQL Server associated to the Database (shown in image on the right).

We recommend that you use the “Standard S0” Plan.



# Step 4 – Create SQL Server + Database

Choose “Standard S0” Plan.

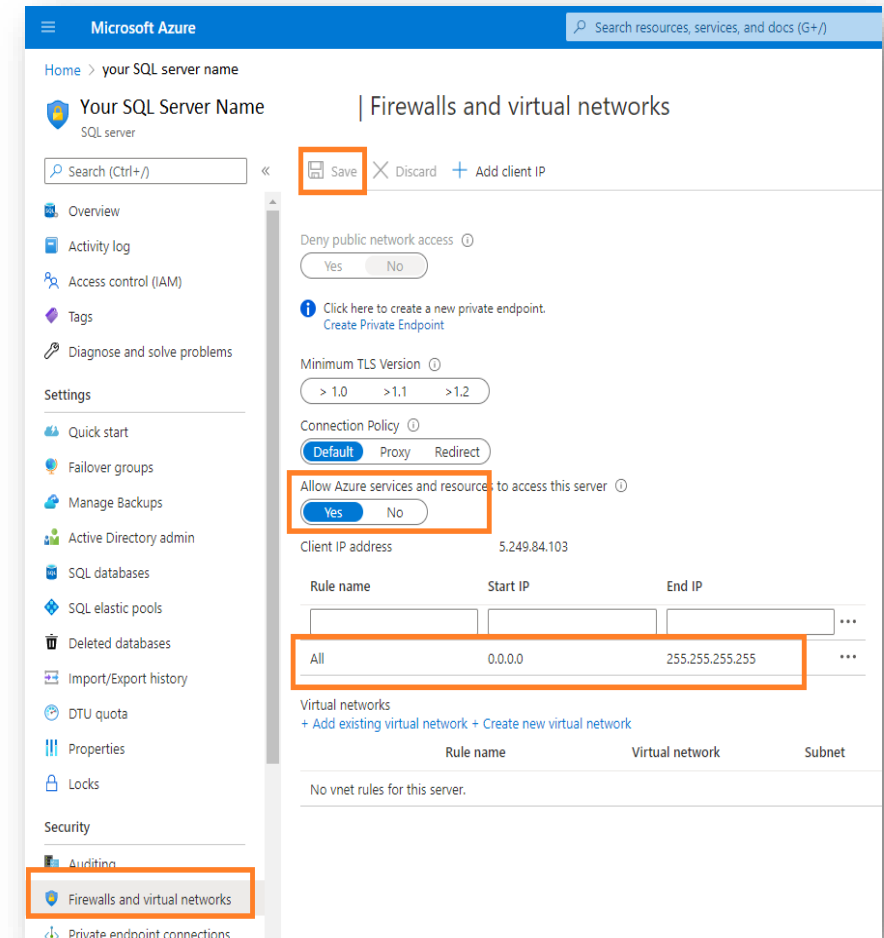




## Step 4 – Create SQL Server + Database

After creating both SQL Server and Database, go to your SQL Server page.

Make sure your “Firewalls and virtual networks” are configured like in the image below. Later, after PowerBI Portal installation, you will be able to restrict this settings, if needed.



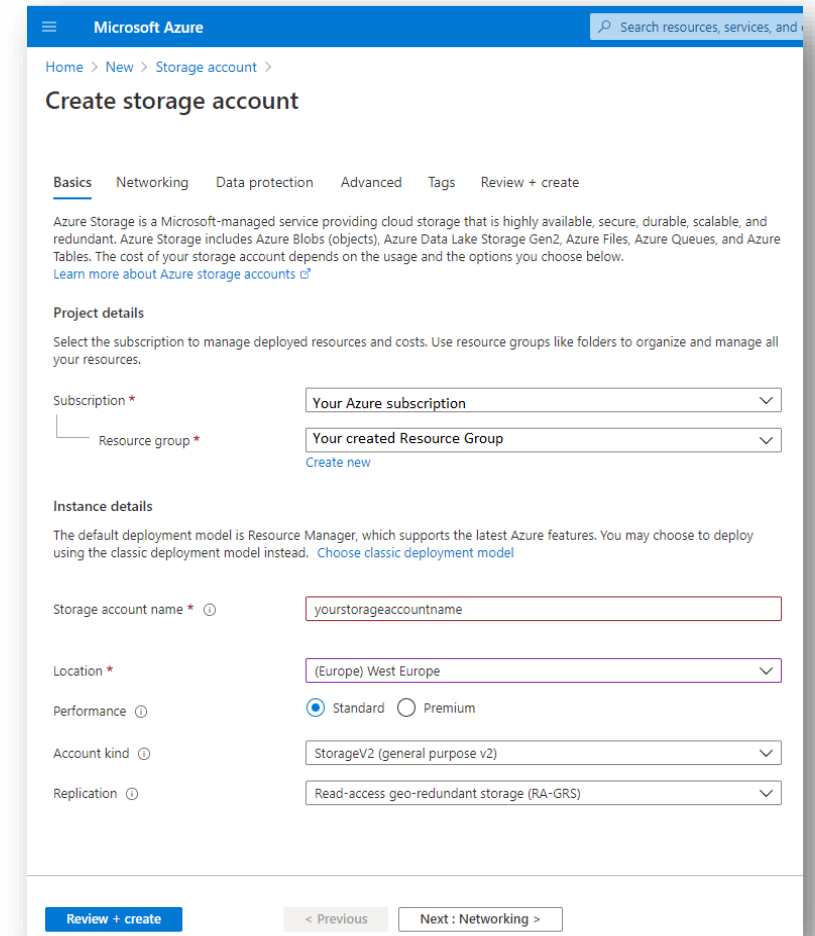
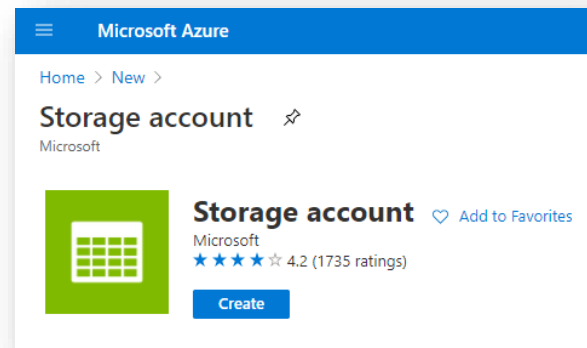


## Step 5 – Create Azure Storage Account

# Step 5 – Create Azure Storage Account

Create a new Storage account resource.

Use the same Azure subscription you used before, as well as the Resource Group. You can find the rest of the configurations needed in the image below.



Microsoft Azure

Home > New > Storage account >

## Create storage account

Basics Networking Data protection Advanced Tags Review + create

Azure Storage is a Microsoft-managed service providing cloud storage that is highly available, secure, durable, scalable, and redundant. Azure Storage includes Azure Blobs (objects), Azure Data Lake Storage Gen2, Azure Files, Azure Queues, and Azure Tables. The cost of your storage account depends on the usage and the options you choose below. [Learn more about Azure storage accounts](#)

**Project details**

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription \*

Resource group \*  [Create new](#)

**Instance details**

The default deployment model is Resource Manager, which supports the latest Azure features. You may choose to deploy using the classic deployment model instead. [Choose classic deployment model](#)

Storage account name \*

Location \*

Performance ☒ Standard ☐ Premium

Account kind

Replication

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



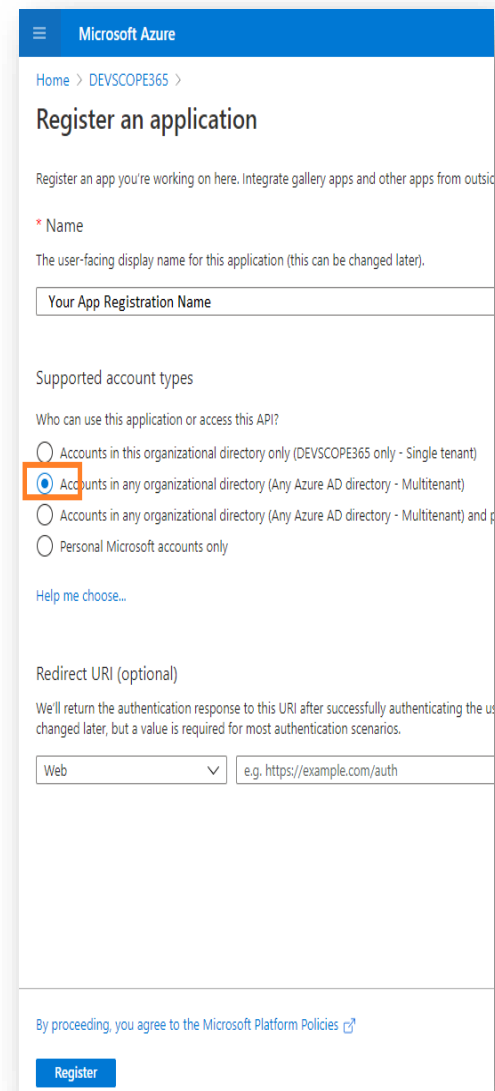
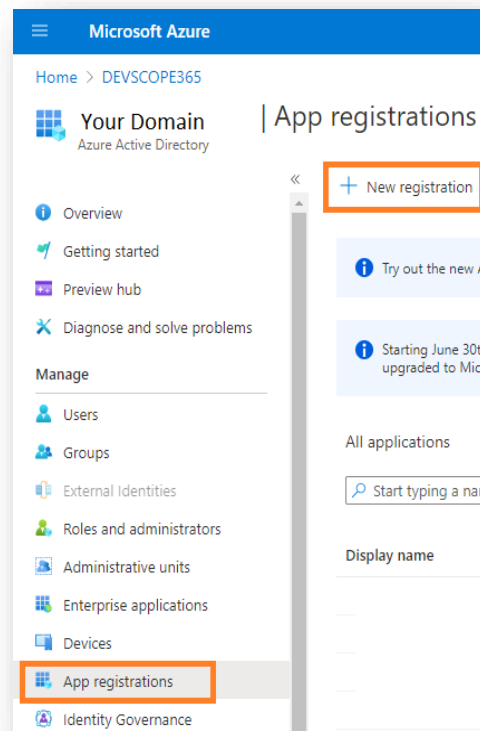
Step 6 – Create Azure AD App Registration for both Back Office and Front Office websites



# Step 6 – Create Azure AD App Registration for both Back Office and Front Office websites

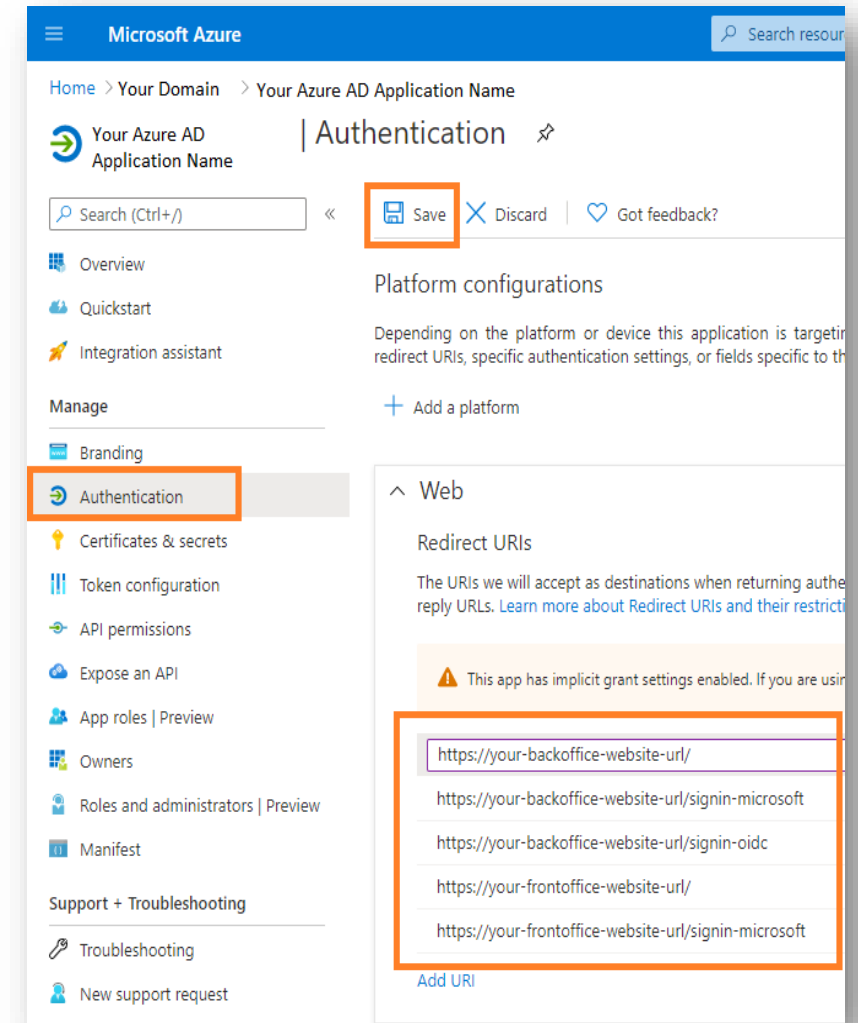
Go to Azure Activate Directory and select “App Registrations”.

Choose your App Registration name and select “Azure AD directory – Multitenant”.



# Step 6 – Create Azure AD App Registration for both Back Office and Front Office websites

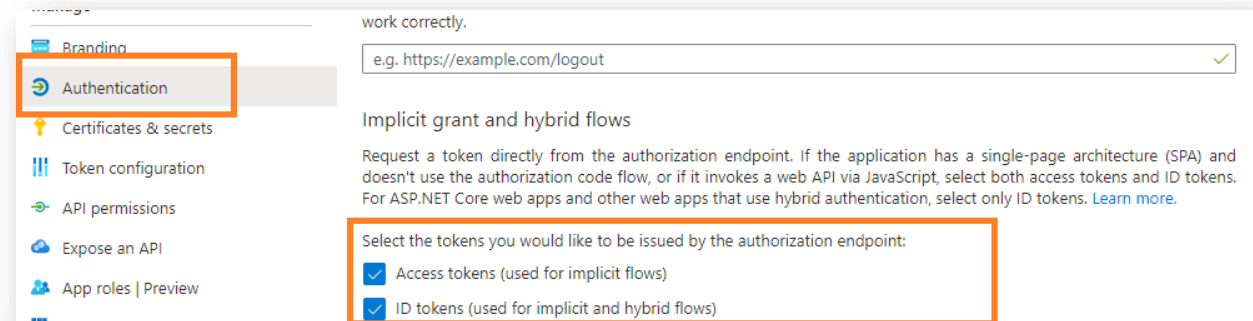
After registering the Azure AD App, you will need to define your redirect URLs in it, to successfully login into your PowerBI Portal Back Office and Front Office.



# Step 6 – Create Azure AD App Registration for both Back Office and Front Office websites

Also, select both tokens allowed for authentication (see in image below).

Moreover, set API permissions like shown in the image below:



Token configuration	API / Permissions name	Type	Description
API permissions	Microsoft Graph (1)		
Expose an API	User.Read	Delegated	Sign in and read user profile



## Step 7 – Create Azure AD App Registration to access Power BI resources



# Step 7 – Create Azure AD App Registration to access Power BI resources

Create another App Registration. Repeat the previous step, chose a different name for your second App Registration and, for the authentication, type the redirect URLs shown in the image on the right.

API permissions:

API / Permissions name	Type	Description
▼ Microsoft Graph (3)		
openid	Delegated	Sign users in
profile	Delegated	View users' basic profile
User.Read	Delegated	Sign in and read user profile
▼ Power BI Service (6)		
Dashboard.Read.All	Delegated	View all dashboards
Dataset.Read.All	Delegated	View all datasets
Group.Read.All	Delegated	View all groups
Metadata.View.Any	Delegated	View content properties
Report.Read.All	Delegated	View all reports
Workspace.Read.All	Delegated	View all workspaces

Search (Ctrl+/) << Save Discard Got feedback?

Overview  
Quickstart  
Integration assistant

Manage

Branding

Authentication

Certificates & secrets  
Token configuration  
API permissions  
Expose an API  
App roles | Preview  
Owners  
Roles and administrators | Preview  
Manifest

Support + Troubleshooting  
Troubleshooting  
New support request

+ Add a platform

Web

Redirect URIs

The URIs we will accept as destinations when returning authentication replies. [Learn more about Redirect URIs and their restrictions](#)

⚠ This app has implicit grant settings enabled. If you are using any of the following, you may experience issues.

https://your-back-office-url/Reports/Add?

Add URI

Front-channel logout URL

This is where we send a request to have the application clear the user's session state correctly.

e.g. https://example.com/logout

Implicit grant and hybrid flows

Request a token directly from the authorization endpoint. If the application doesn't use the authorization code flow, or if it invokes a web API via JavaScript, you must use implicit grant. For ASP.NET Core web apps and other web apps that use hybrid authentication, you can use either implicit grant or hybrid flows.

Select the tokens you would like to be issued by the authorization endpoint:

☒ Access tokens (used for implicit flows)

☒ ID tokens (used for implicit and hybrid flows)



thank>you

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