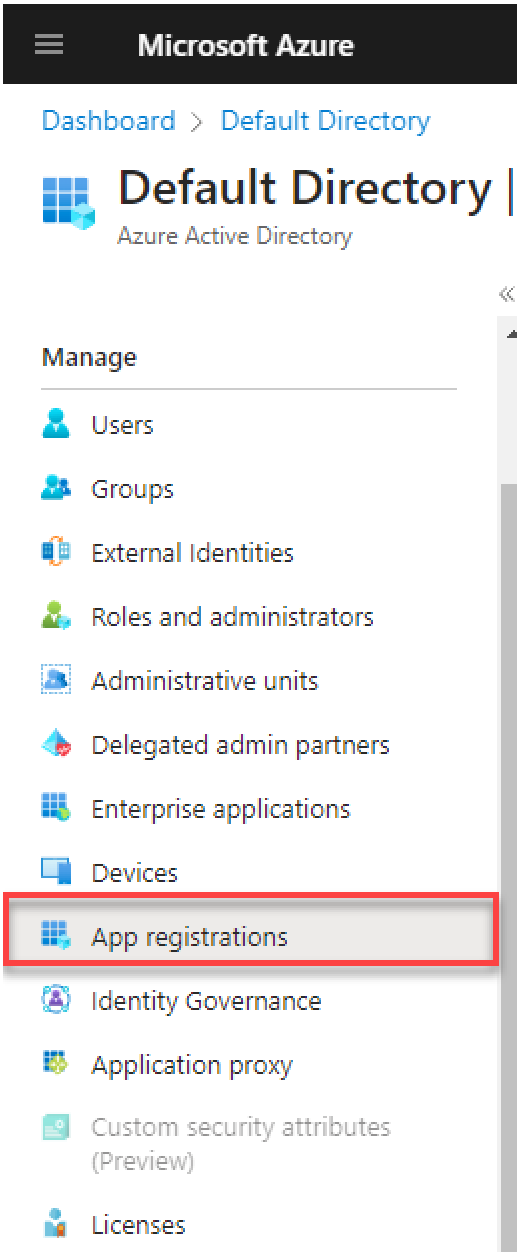
Document Converter Deployment Instructions

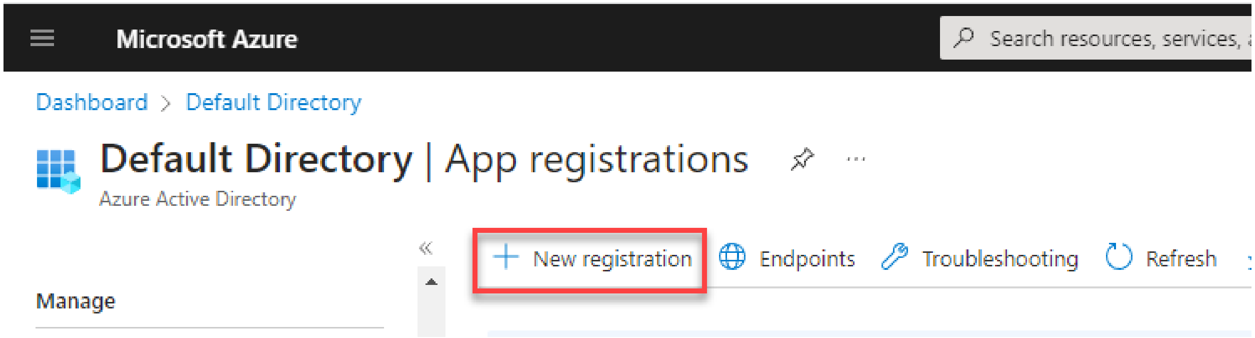
Azure configuration

- Create an App registration

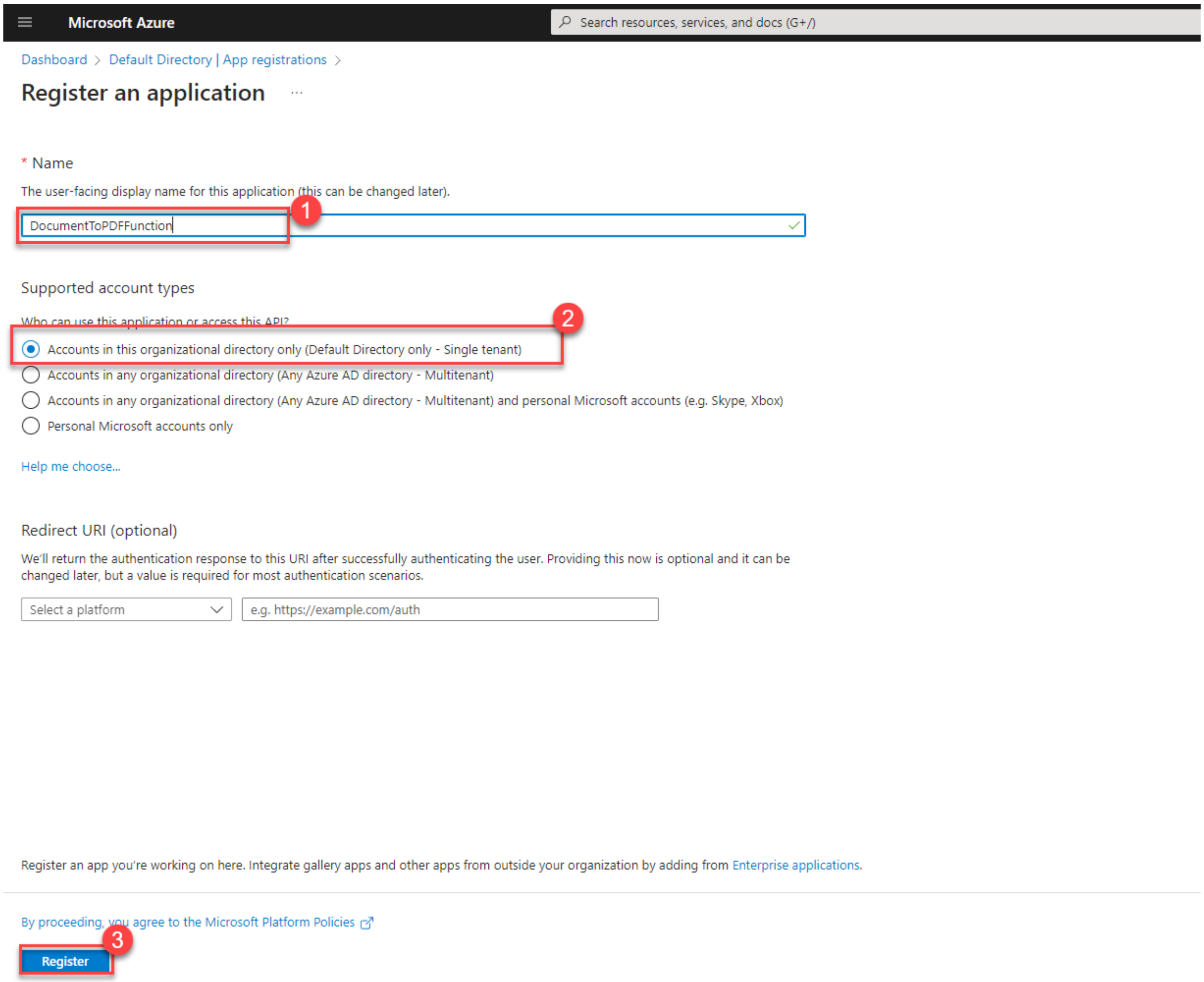
1. Select App Registrations tab in Azure AD



2. Select New Registration


Microsoft Azure
Search resources, services,
Dashboard > Default Directory
Default Directory | App registrations
Azure Active Directory
New registration
Endpoints
Troubleshooting
Refresh
Manage

3. Type application name, select Accounts in this organization (single tenant), and select register


Microsoft Azure
Search resources, services, and docs (G+/)
Dashboard > Default Directory | App registrations >
1
2
3

Register an application

* Name

The user-facing display name for this application (this can be changed later).

DocumentToPDFFunction

Supported account types

Who can use this application or access this API?

● Accounts in this organizational directory only (Default Directory only - Single tenant)

○ Accounts in any organizational directory (Any Azure AD directory - Multitenant)

○ Accounts in any organizational directory (Any Azure AD directory - Multitenant) and personal Microsoft accounts (e.g. Skype, Xbox)

○ Personal Microsoft accounts only

Help me choose...

Redirect URI (optional)

We'll return the authentication response to this URI after successfully authenticating the user. Providing this now is optional and it can be changed later, but a value is required for most authentication scenarios.

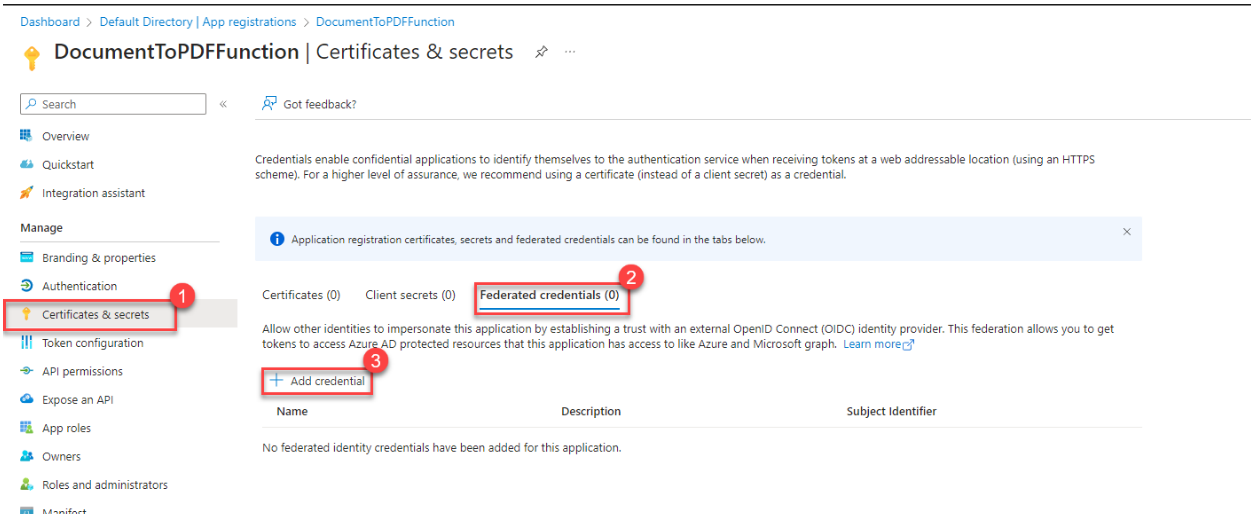
Select a platform | e.g. https://example.com/auth

Register an app you're working on here. Integrate gallery apps and other apps from outside your organization by adding from Enterprise applications.

By proceeding, you agree to the Microsoft Platform Policies

Register

4. After Registration is created, select the new registration. Select Certificates and Secrets. Select the Federated Credentials Tab and then select add credential.



DocumentToPDFFunction | Certificates & secrets

Credentials enable confidential applications to identify themselves to the authentication service when receiving tokens at a web addressable location (using an HTTPS scheme). For a higher level of assurance, we recommend using a certificate (instead of a client secret) as a credential.

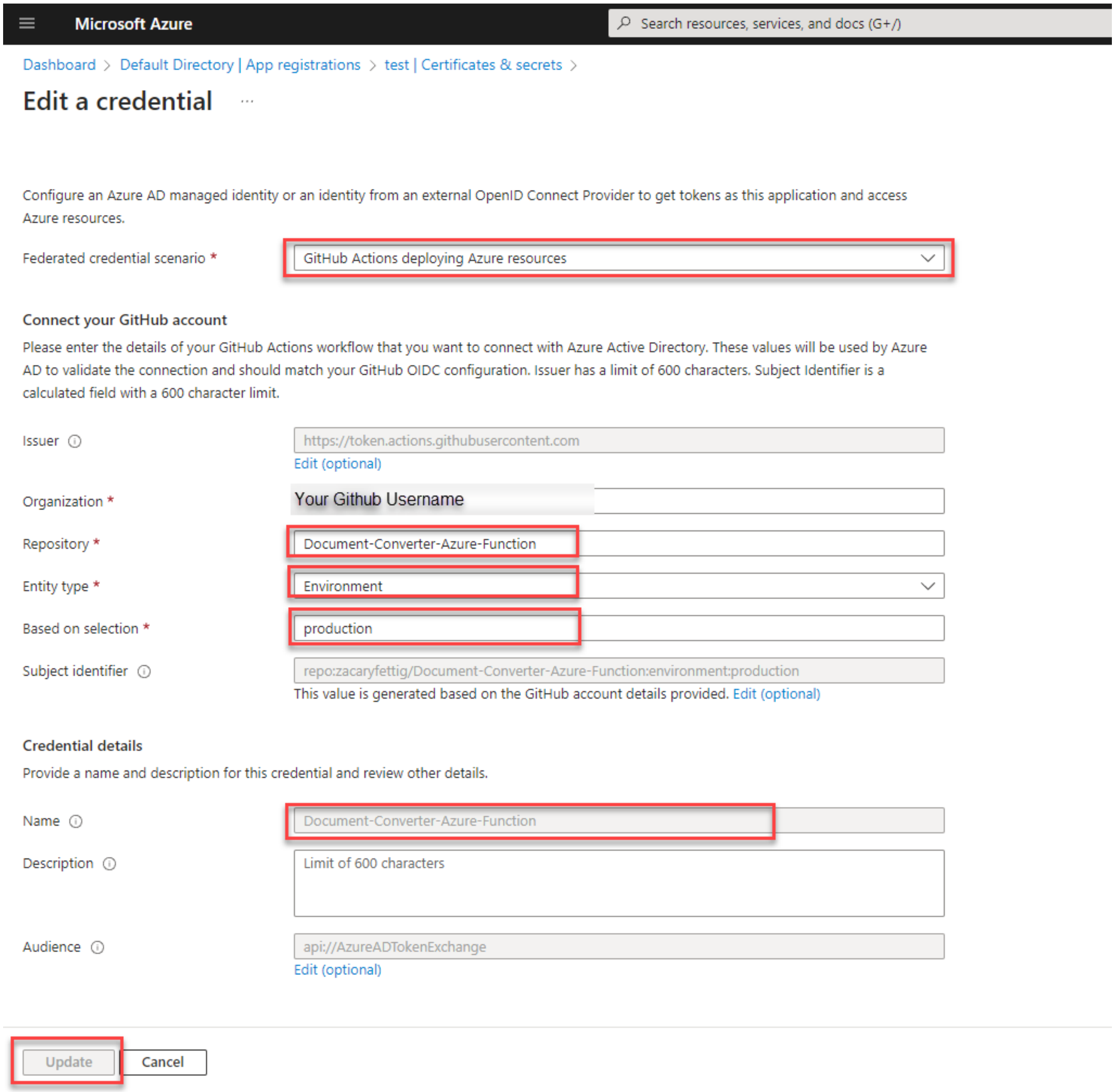
Application registration certificates, secrets and federated credentials can be found in the tabs below.

Allow other identities to impersonate this application by establishing a trust with an external OpenID Connect (OIDC) identity provider. This federation allows you to get tokens to access Azure AD protected resources that this application has access to like Azure and Microsoft graph. Learn more

Name	Description	Subject Identifier

No federated identity credentials have been added for this application.

5. Select GitHub Actions Deploying Azure resources



Microsoft Azure
Search resources, services, and docs (G+/)
Dashboard > Default Directory | App registrations > test | Certificates & secrets >

Edit a credential ...

Configure an Azure AD managed identity or an identity from an external OpenID Connect Provider to get tokens as this application and access Azure resources.

Federated credential scenario * GitHub Actions deploying Azure resources

Connect your GitHub account

Please enter the details of your GitHub Actions workflow that you want to connect with Azure Active Directory. These values will be used by Azure AD to validate the connection and should match your GitHub OIDC configuration. Issuer has a limit of 600 characters. Subject Identifier is a calculated field with a 600 character limit.

Issuer ⓘ https://token.actions.githubusercontent.com
Edit (optional)

Organization * Your Github Username

Repository * Document-Converter-Azure-Function

Entity type * Environment

Based on selection * production

Subject identifier ⓘ repo:zacaryfettig/Document-Converter-Azure-Function:environment:production
This value is generated based on the GitHub account details provided. Edit (optional)

Credential details

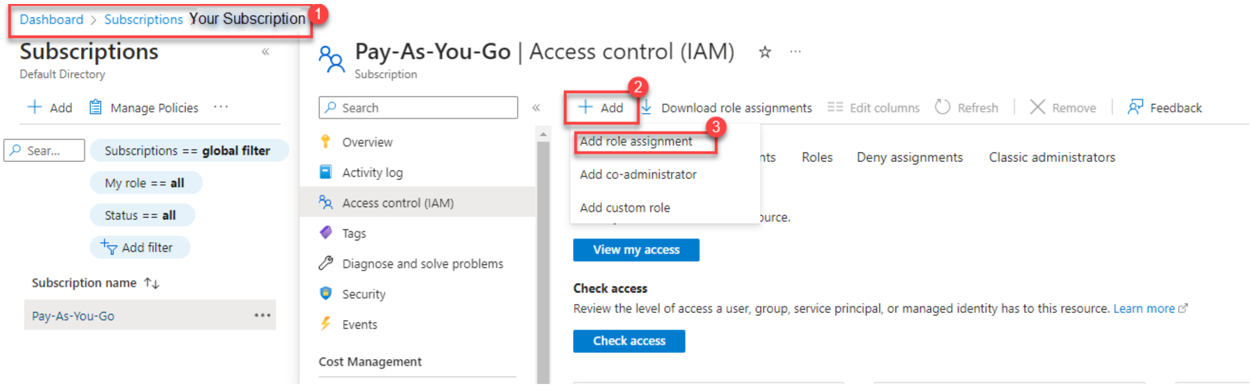
Provide a name and description for this credential and review other details.

Name ⓘ Document-Converter-Azure-Function

Description ⓘ Limit of 600 characters

Audience ⓘ api://AzureADTokenExchange
Edit (optional)

6. Go to your subscription. Select Add. Add Role Assignment.



Dashboard > Subscriptions Your Subscription

Subscriptions

Default Directory

+ Add   Manage Policies ···

Sear...   Subscriptions == **global filter**

My role == **all**

Status == **all**

Add filter

Subscription name ↑↓

Pay-As-You-Go ···

Pay-As-You-Go | Access control (IAM) ☆ ···

Subscription

Search

- Overview
- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems
- Security
- Events

Cost Management

+ Add   Download role assignments   Edit columns   Refresh   Remove   Feedback

- Add role assignment
- Add co-administrator
- Add custom role

nts   Roles   Deny assignments   Classic administrators

urce.

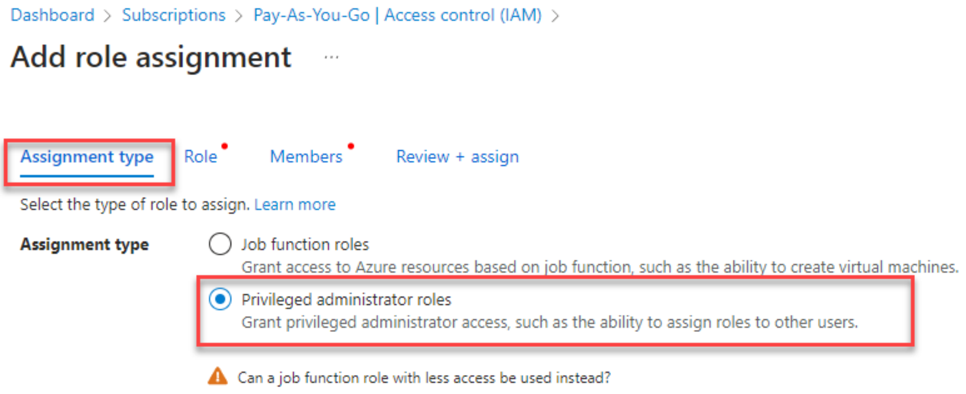
View my access

Check access

Review the level of access a user, group, service principal, or managed identity has to this resource. Learn more

Check access

6. Select Assignment Type. Select Privileged administrator roles



Dashboard > Subscriptions > Pay-As-You-Go | Access control (IAM) >

Add role assignment ···

Assignment type   Role   Members   Review + assign

Select the type of role to assign. Learn more

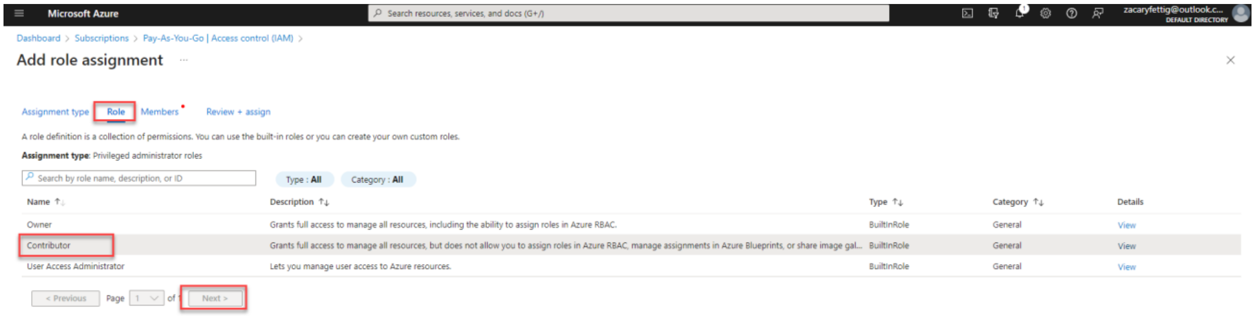
Assignment type

○ Job function roles
Grant access to Azure resources based on job function, such as the ability to create virtual machines.

● Privileged administrator roles
Grant privileged administrator access, such as the ability to assign roles to other users.

⚠ Can a job function role with less access be used instead?

7. Select Contributor for the role



Microsoft Azure   Search resources, services, and docs (G+/)   zacaryfettig@outlook.c... DEFAULT DIRECTORY

Dashboard > Subscriptions > Pay-As-You-Go | Access control (IAM) >

Add role assignment ···

Assignment type   Role   Members   Review + assign

A role definition is a collection of permissions. You can use the built-in roles or you can create your own custom roles.

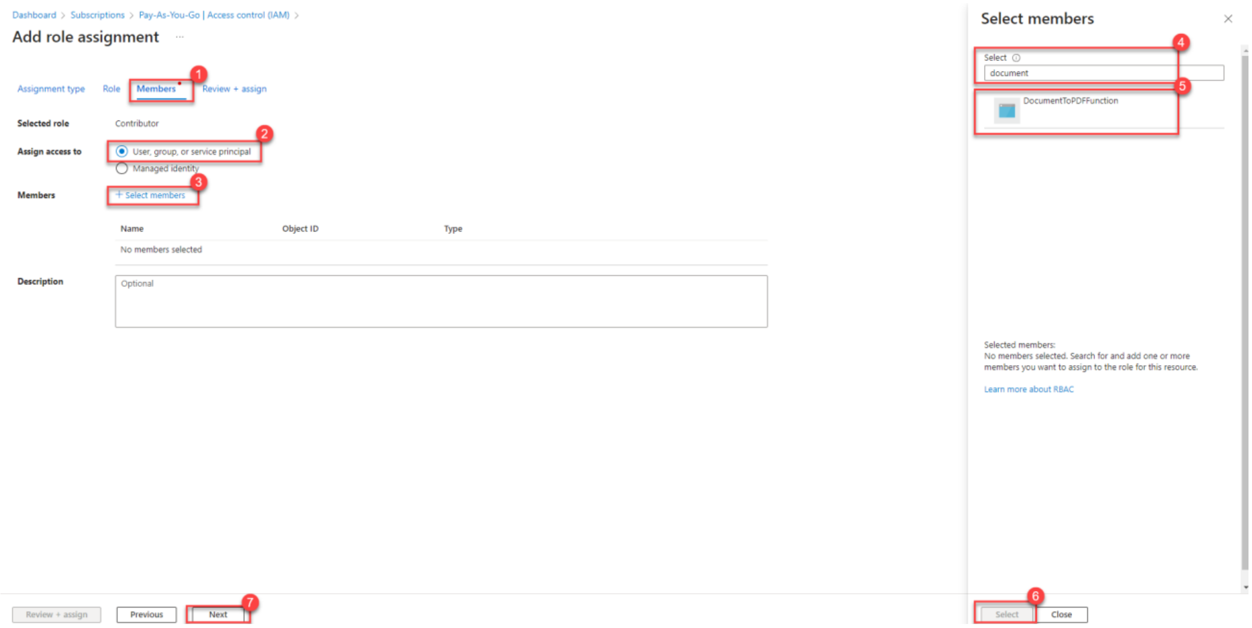
Assignment type: Privileged administrator roles

Search by role name, description, or ID   Type : **All**   Category : **All**

Name ↑↓	Description ↑↓	Type ↑↓	Category ↑↓	Details
Owner	Grants full access to manage all resources, including the ability to assign roles in Azure RBAC.	BuiltInRole	General	View
Contributor	Grants full access to manage all resources, but does not allow you to assign roles in Azure RBAC, manage assignments in Azure Blueprints, or share image gal...	BuiltInRole	General	View
User Access Administrator	Lets you manage user access to Azure resources.	BuiltInRole	General	View

< Previous   Page 1 of 1   Next >

8. Under the Members tab select Assign access to user, group, or service principle. Select Members. Type name of app registration and select from the list. Select the select button and continue to next screen.



Dashboard > Subscriptions > Pay-As-You-Go | Access control (IAM) >

Add role assignment ···

Assignment type Role Members Review + assign

Selected role Contributor

Assign access to ● User, group, or service principal

○ Managed identity

Members + Select members

Name	Object ID	Type
No members selected		

Description Optional

Select members

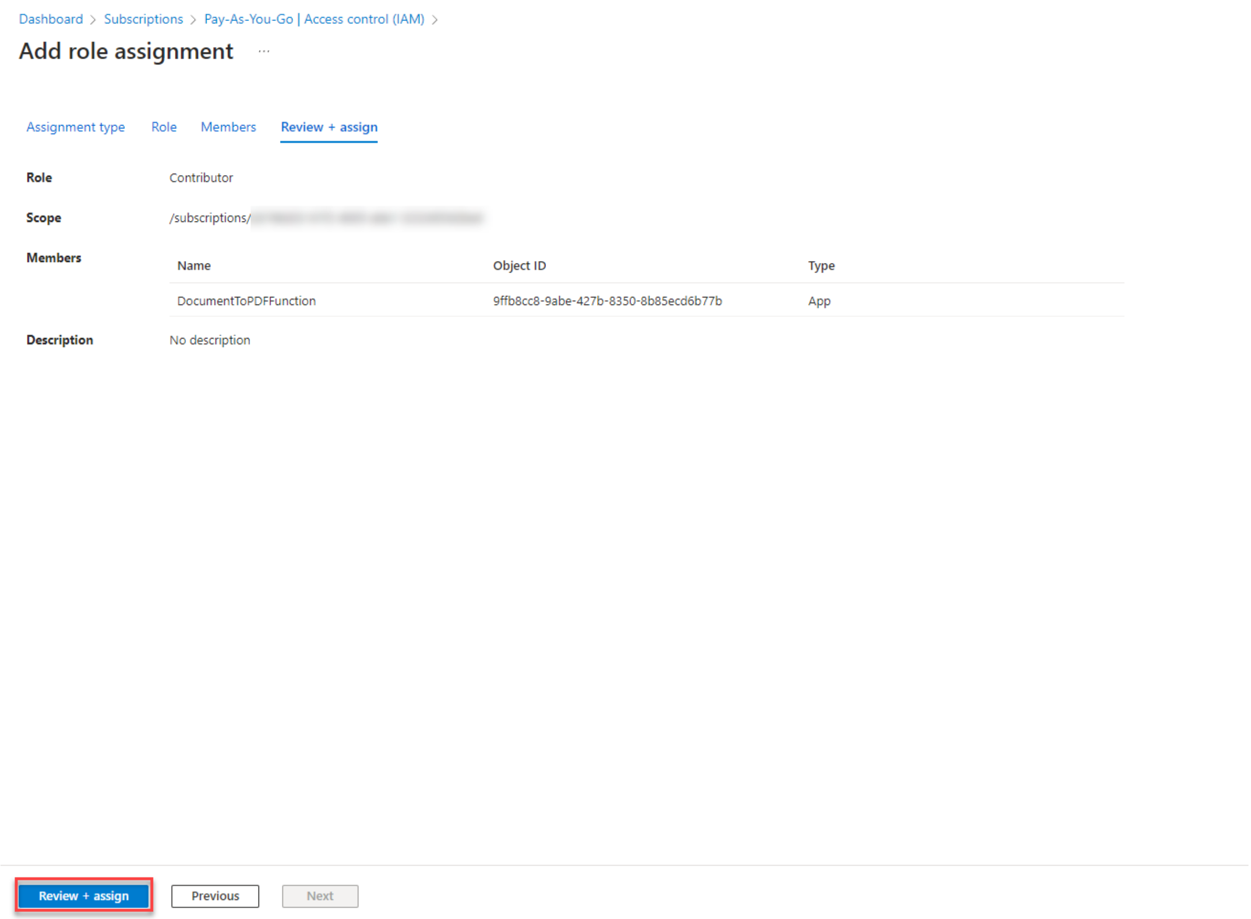
Select ⓘ document

DocumentToPDFFunction

Selected members:
No members selected. Search for and add one or more members you want to assign to the role for this resource.

Learn more about RBAC

9. Review and Assign



Dashboard > Subscriptions > Pay-As-You-Go | Access control (IAM) >

Add role assignment ···

Assignment type Role Members Review + assign

Role Contributor

Scope /subscriptions/[redacted]

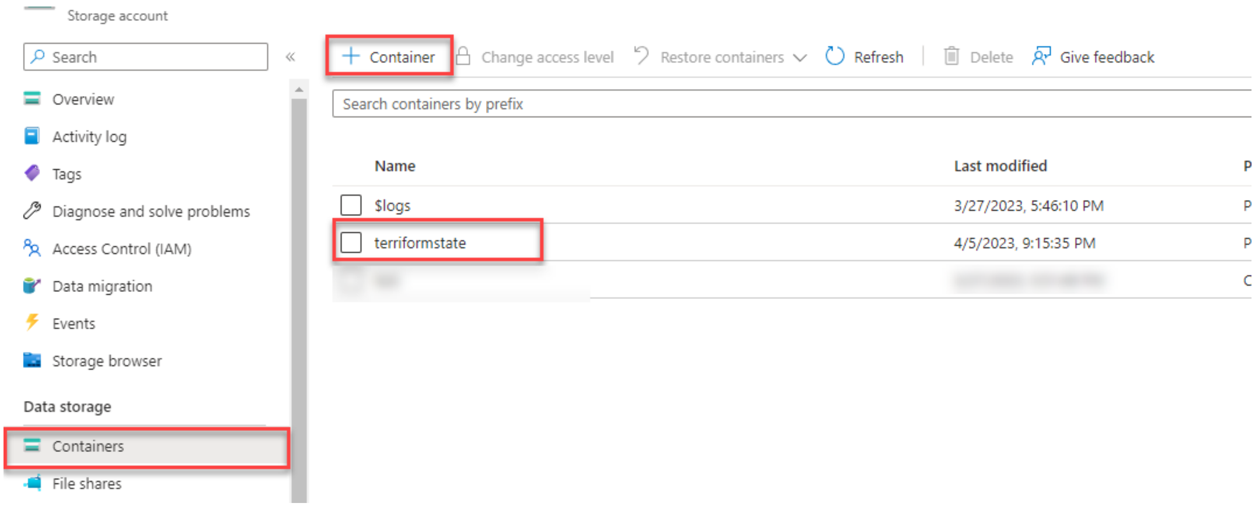
Members

Name	Object ID	Type
DocumentToPDFFunction	9ffb8cc8-9abe-427b-8350-8b85ecd6b77b	App

Description No description

10. Create a resource group to store Terraform State files for deployment

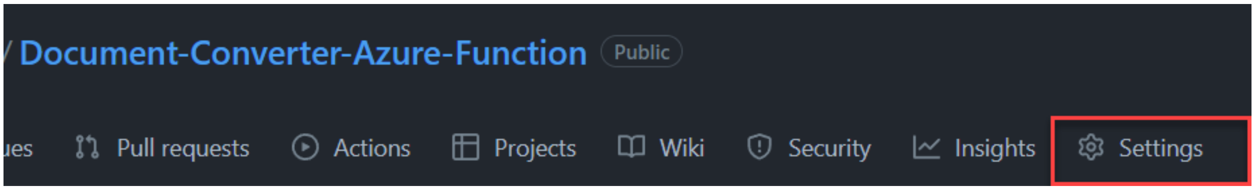
11. Create a storage account to store the State Files. Create a container inside the Storage account used to store the Terriform State Files.



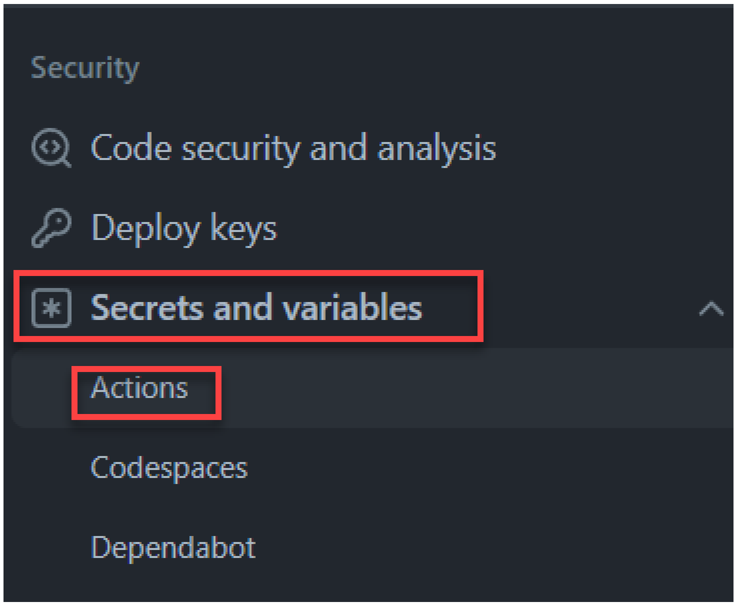
Name	Last modified	P
$logs	3/27/2023, 5:46:10 PM	P
terriformstate	4/5/2023, 9:15:35 PM	P
[redacted]	[redacted]	C

GitHub Configuration

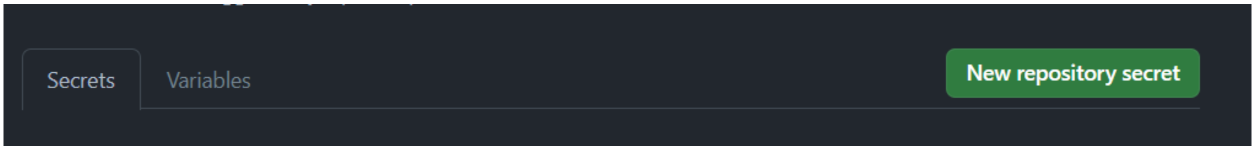
1. In the Document Converter Azure Function repository select Settings



2. Under the security section of settings select secrets and variables. Select Actions.



3. Select the secrets tab and New repository secret.



4. Create the secrets that will be used to identify your Azure account to enable Azure deployment

--Azure Client ID: Can be found on the overview page of the DocumentToPDFFunction App registration

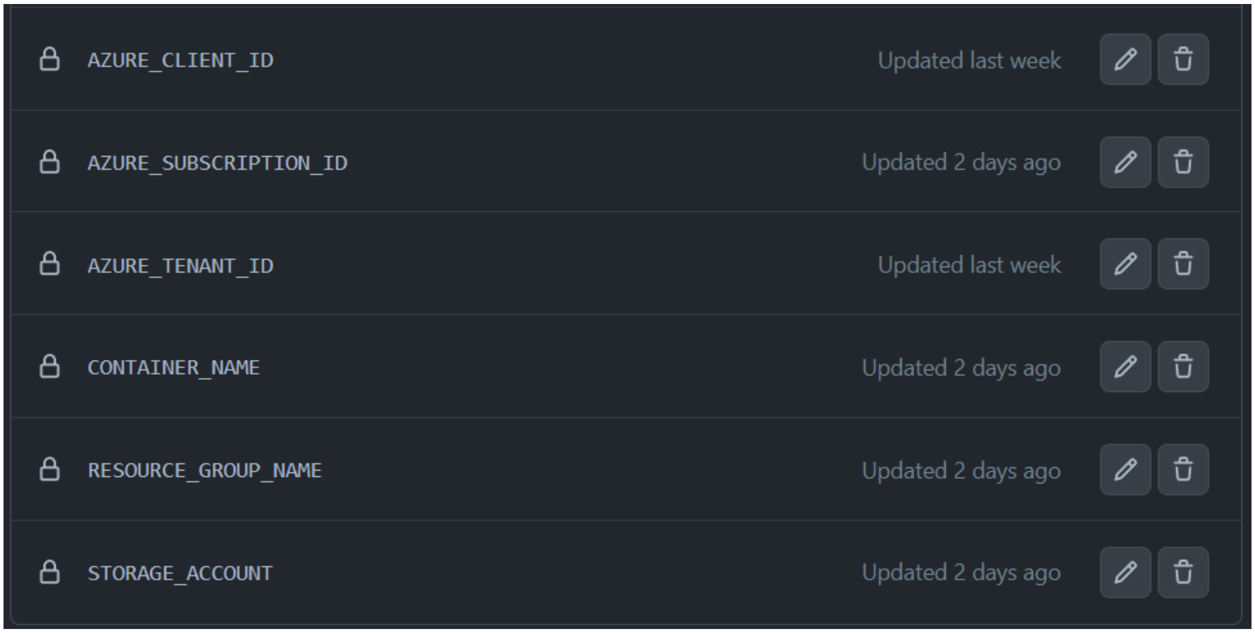
--Subscription ID: Found on the overview page of your subscription

--Tenant ID: Found on the overview page of the main Azure AD page

--Container Name: Name of the container inside of the storage account

--Resource Group: resource group used to hold the Terriform State Files

--Storage Account: Storage account name of the account used to store the Terriform State Files

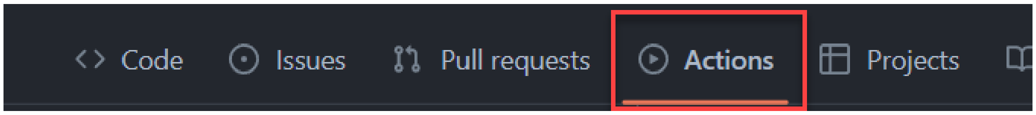


AZURE_CLIENT_ID	Updated last week
AZURE_SUBSCRIPTION_ID	Updated 2 days ago
AZURE_TENANT_ID	Updated last week
CONTAINER_NAME	Updated 2 days ago
RESOURCE_GROUP_NAME	Updated 2 days ago
STORAGE_ACCOUNT	Updated 2 days ago

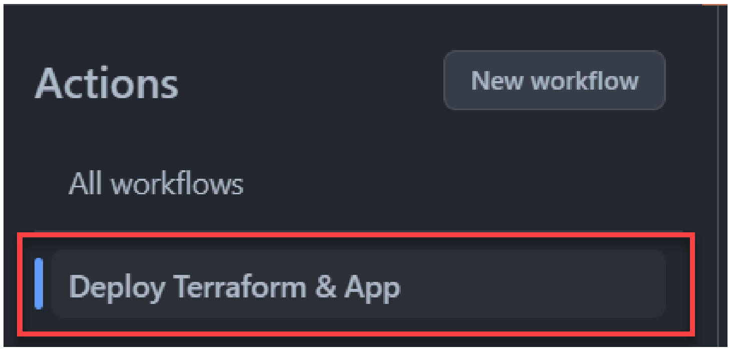
Setup for Deployment is Finished

Run deployment through GitHub Actions

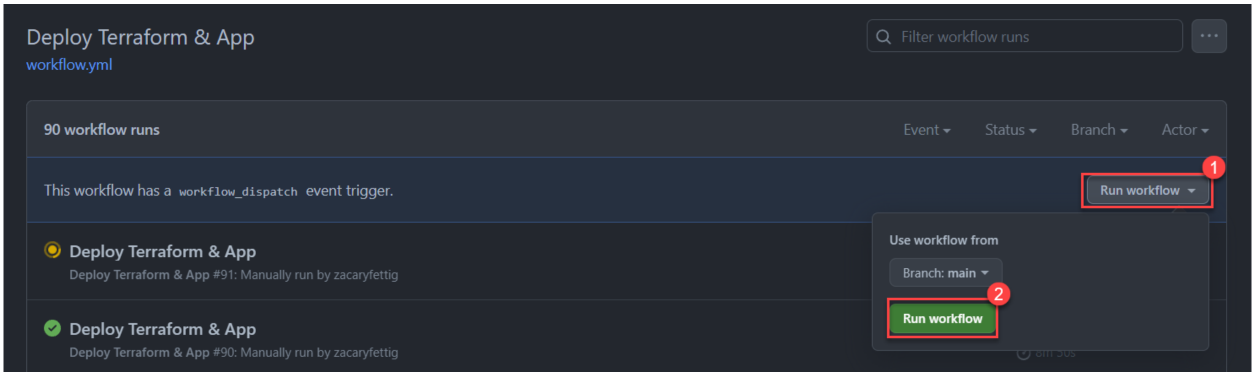
1. In the repo select Actions tab



2. Select Deploy Terraform & App from the left side menu



3. Select Run Workflow on the right side of the page


Deploy Terraform & App

workflow.yml

90 workflow runs

This workflow has a `workflow_dispatch` event trigger.

Deploy Terraform & App

Deploy Terraform & App #91: Manually run by zacaryfettig

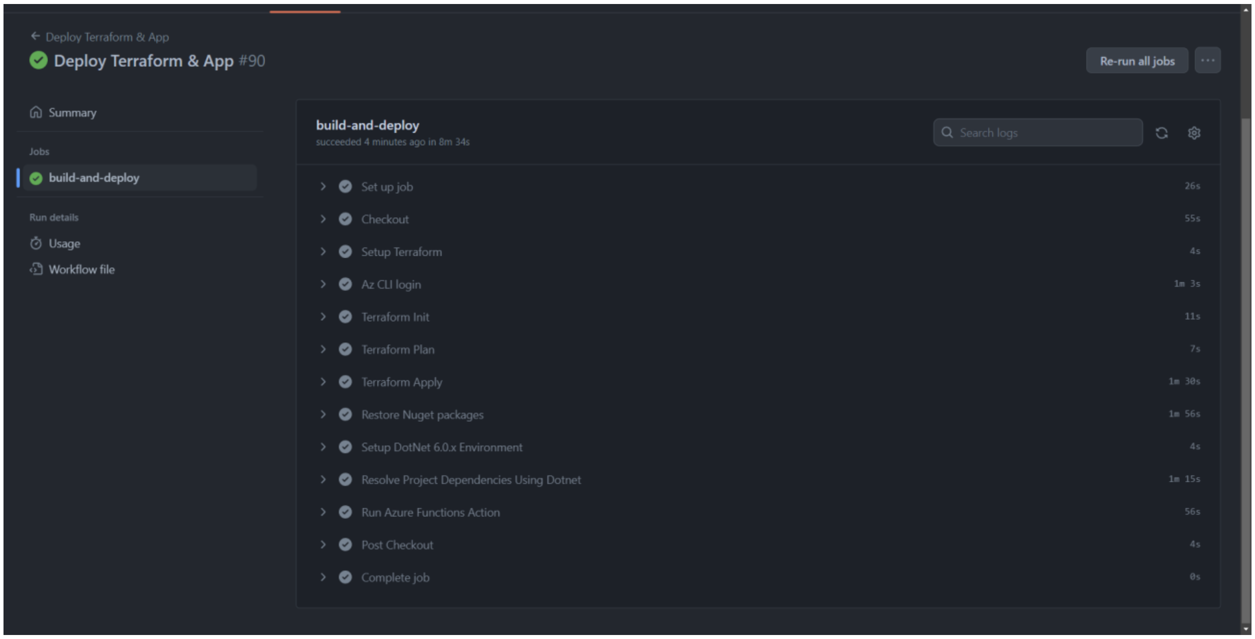
Deploy Terraform & App

Deploy Terraform & App #90: Manually run by zacaryfettig

Use workflow from

Branch: main

View progress of the build by clicking on the job


Deploy Terraform & App #90

build-and-deploy

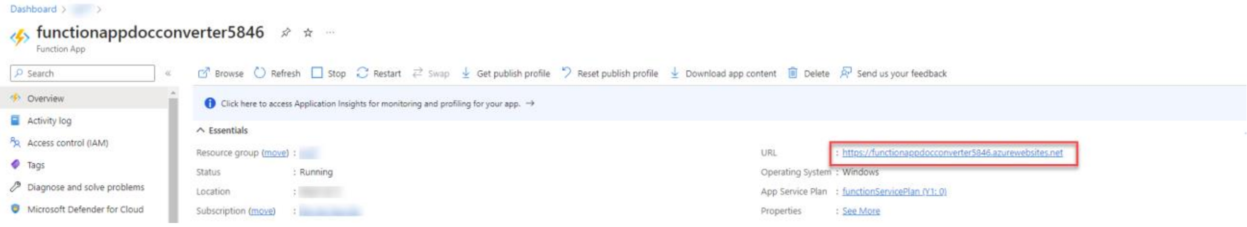
succeeded 4 minutes ago in 8m 34s

```
Set up job                                   26s
Checkout                                     55s
Setup Terraform                               4s
Az CLI login                              1m 3s
Terraform Init                               11s
Terraform Plan                                7s
Terraform Apply                          1m 30s
Restore Nuget packages                   1m 56s
Setup DotNet 6.0.x Environment                4s
Resolve Project Dependencies Using Dotnet 1m 15s
Run Azure Functions Action                   56s
Post Checkout                                 4s
Complete job                                  0s
```

Green check mark means that build has completed successfully

Accessing the Word to PDF program

1. Get url of application from the functionApp resource overview page



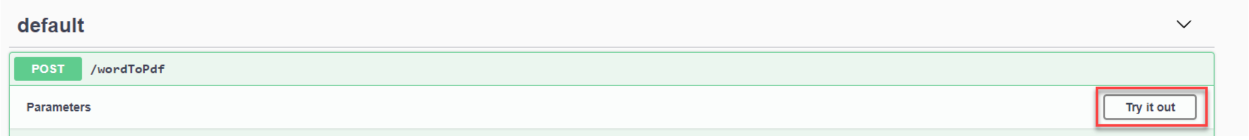
Resource group (move) : [redacted]
Status : Running
Location : [redacted]
Subscription (move) : [redacted]

URL : https://functionappdocconverter5846.azurewebsites.net
Operating System : Windows
App Service Plan : functionServicePlan (Y1: 0)
Properties : See More

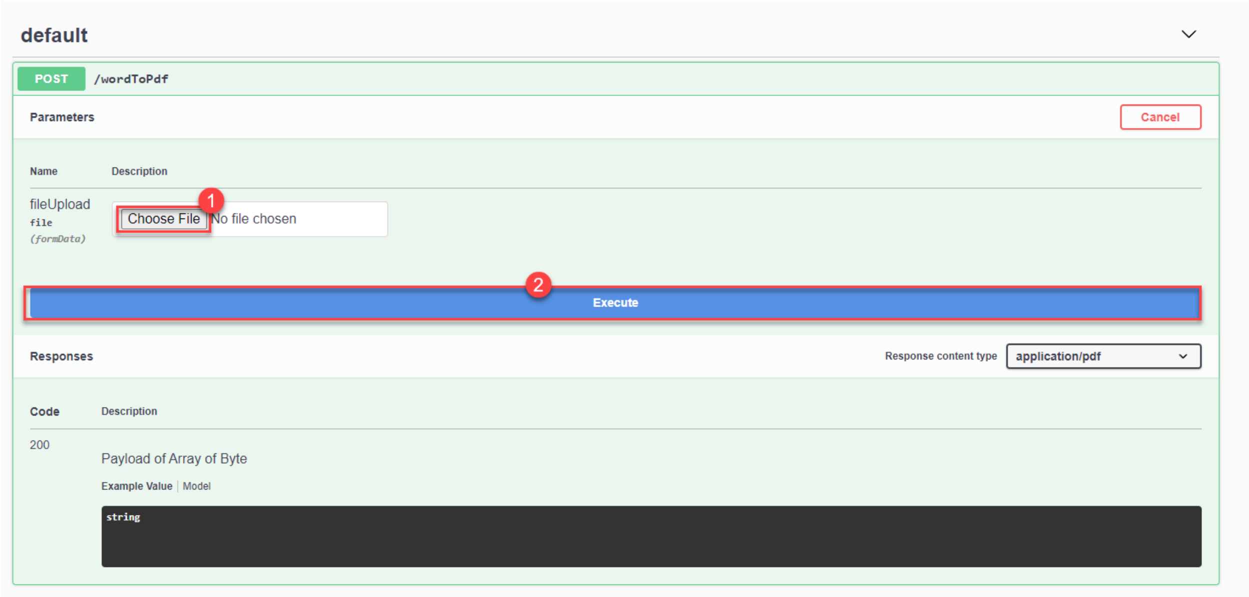
2. Add to the end of the url: /api/swagger/ui#/default

Full url using this example: https://functionappdocconverter5846.azurewebsites.net//api/swagger/ui#/default

3. Select try it out



4. Choose word file to upload and select Execute



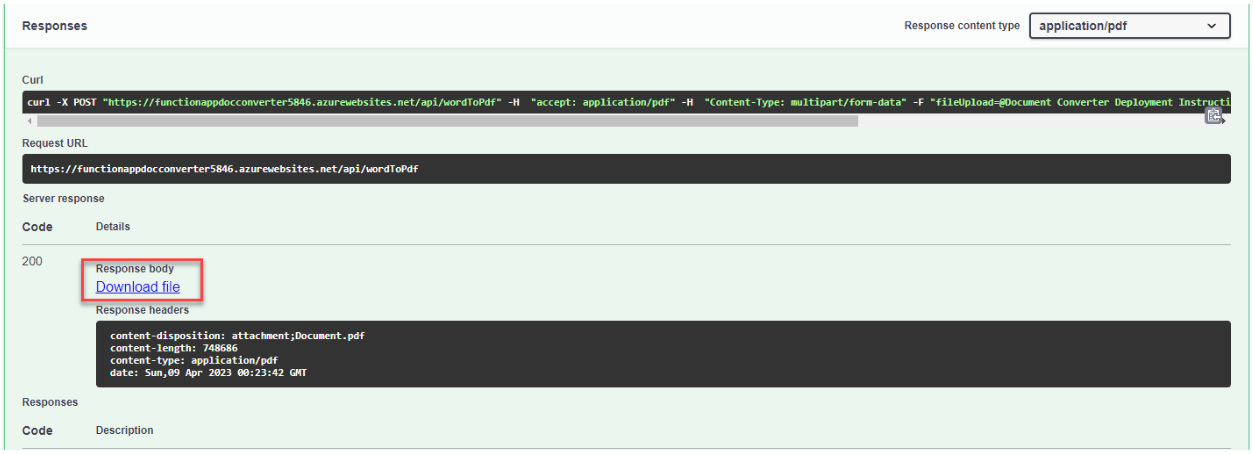
fileUpload
file
(formData)
No file chosen

Response content type: application/pdf

200 Payload of Array of Byte

```
string
```

Selecting Download File will Download the converted document as a pdf file



Curl

```
curl -X POST "https://functionappdocconverter5846.azurewebsites.net/api/wordToPdf" -H  "accept: application/pdf" -H  "Content-Type: multipart/form-data" -F "fileUpload=@Document Converter Deployment Instructi
```

Request URL

```
https://functionappdocconverter5846.azurewebsites.net/api/wordToPdf
```

Server response

Code	Details
200	Response body Download file Response headers

```
content-disposition: attachment;Document.pdf
content-length: 748686
content-type: application/pdf
date: Sun,09 Apr 2023 00:23:42 GMT
```

Responses

Code	Description