

Lab 7: Azure Web app with Container

Objective

1. Provision an Azure Web App
2. Create a GitHub workflow and change the image

Note:

1. Steps to log into VM (Each participant will have a separate user/pwd)
 - a. Open in a private window <https://training.datacouch.io/pluralsight>
 - b. Enter the provided username and password.

All the following steps are to be done within the Virtual Machine.

- c. Steps to Log into Azure Portal (4-5 participants will be in each group)
 - i. Go to <https://portal.azure.com>
 - ii. Login with the supplied credentials (username and password).
 1. Each group has a unique integer for their login [1-4] eg. **usergroup[1-4]** that will remain same for the duration of the course.
 2. Complete username and Password will be provided in the class.
 3. Each usergroup has an associated resource group which is **rg-usergroup[1-4]**

Section 1: Provision an Azure Web app

Steps

1. Login into the Virtual Machine
2. Login into Azure Portal
3. Type **"App Services"** on the search bar and select **"App Services"** from dropdown.
4. Click on **" +Create "** button
5. **Basics Tab**
 - a. Select the resource group from the dropdown.
 - b. Give unique name to Web App name as **"runwebapp"+"group number"+"participant id"** add your group number and instance as suffix e.g. if your group number is 4 and participant id is 02, name the machine as **"runwebapp402"** .
 - c. Publish: Choose **"Docker Container"**
 - d. Operating System: Choose **"Linux"**
 - e. Region: Choose **East US**

- f. Choose the default Linux Plan
 - g. Pricing plan: Select **"Basic B1"**
 - h. Don't change the other defaults and click on **"Next: Docker"**
6. **Docker Tab**
 - a. Image Source: Select "Docker Hub"
 - i. Access Type: Public
 - ii. Image and tag: Type **"wordpress:latest"**
 - b. Click on **"Next: Networking"**
7. **Networking Tab**
 - a. Don't change the defaults and click on **"Next: Monitoring"**
8. **Monitoring Tab**
 - a. Don't change the defaults and click on **"Review + Create"**
9. **Review+Create Tab**
 - a. Let the validation run and pass.
 - b. Click on **"Create"** and wait for the deployment to complete
 - c. Click on **"Go to resource"**. This will take you to the overview page of the newly created Web App

Next Steps

1. In the overview section for the Web App, Click on the "Browse" button.
 - a. It will open a new browser window and you will see the initial configuration window of wordpress website.
2. In the Deployment Center->look at the different options

Section 2: Create a GitHub and deploy an image on Web App

Steps

1. Login into the Virtual Machine
2. Go to your repo.
3. Go to Actions and click on **"New workflow"** and click on **"set up a workflow yourself"**
4. Rename the file as **"azurewebappcontainer.yml"** and copy and paste the below contents and commit and save the file.

Please change the name of the webapp marked in red to your Azure web application name and ACR name to the name of the Container registry.

```

on: [workflow_dispatch]

name: AzureWebAppContainer

env:
  CONTAINER_REGISTRY: <acr name>.azurecr.io

jobs:
  azurecontainer:
    runs-on: ubuntu-latest

    steps:
      - name: Login to Azure
        uses: azure/login@v1
        with:
          creds: '${{ secrets.AZURE_CREDENTIALS }}'

      - name: ACR Login
        uses: docker/login-action@v2
        with:
          registry: ${{ env.CONTAINER_REGISTRY }}
          username: <acr name>
          password: '${{ secrets.ACR_PWD }}'

      - name: 'Deploy to Azure Web App for Container'
        uses: azure/webapps-deploy@v2
        with:
          app-name: <Web App name>
          images: '${{ env.CONTAINER_REGISTRY }}/nginx:mycopy'

```

5. We have configured this workflow to run manually. Click on Actions again. Then click on the workflow name “**AzureWebAppContainer**” and click on “**Run workflow**”.
6. Wait for the workflow to start the job. Once it is completed, refresh the web app url and it should reflect the default nginx page.
7. If you see an error, it’s because the Admin login for ACR is new.
8. To resolve that, you must go to Deployment center within the App Services and manually select Registry, Image and Tag from the dropdown and click on Save. Restart the Web App and click on Browse to see the Nginx default web page.

: (Application Error

If you are the application administrator, you can access the [diagnostic resources](#).

End of Lab.