Activate Azure with App Service Environment

Student Lab Manual

Version 1.0

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Contents

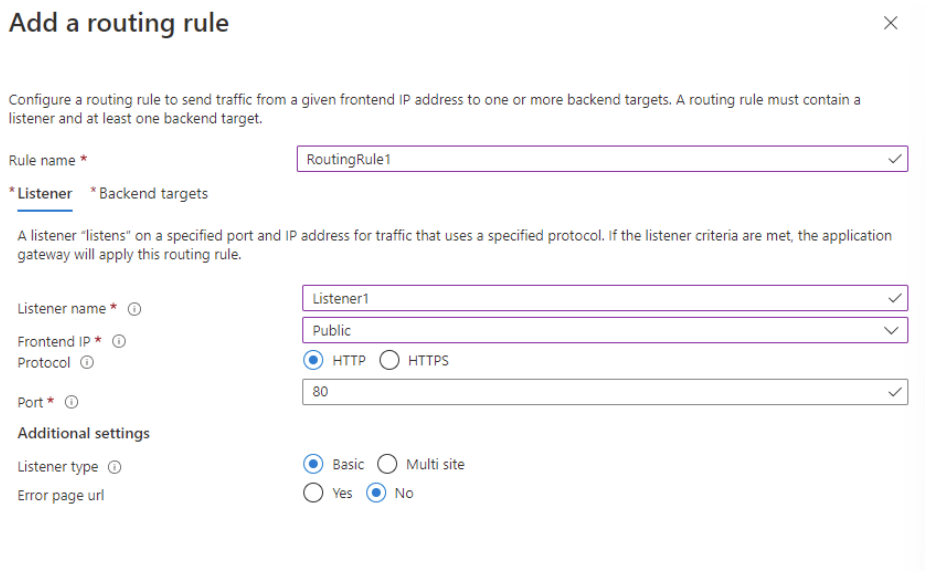
Exercise 1 - Create an Application Gateway in the ASEv3

1. On the Azure portal menu or from the **Home** page, select **Create a resource**.
2. In the **Search services and marketplace** search bar, search for **Application Gateway**
3. Select **Create** -> **Application Gateway**
4. From the **Basics** tab:
    1. Select the **Subscription** and **Resource Group** that was used in Module 1.
    2. For the **Application Gateway name**, enter an appropriate name.
    3. For **Region**, select the appropriate region.
    4. For the **Tier** dropdown, select **Standard V2**
    5. For **Enable autoscaling**, choice **No**
    6. For **Instance count**, enter **1**
    7. For **Firewall status**, select **Enable**
    8. For **Firewall mode**, select **Prevention**
    9. For **Availability zone**, select **None**
    10. For **HTTP2**, select **Disabled**
    11. For **Virtual Network**, select the virtual network created in Module 1 - Lab 1
    12. For **Subnet**, select the application gateway subnet created in Module 1 - Lab 1 (Example: appgw-subnet).
    13. Click on **Next: Frontends**
5. From the **Frontends** tab:
    1. For **Frontend IP address type**, select **Public**
    2. For **Public IP address**, click on **Add new**
    3. In the **Add a public IP** popup:
        1. For **Name**, give the public IP a unique name (Example: ase-appgw-pip)
        2. Click on **OK**
    4. Click on **Next: Backends**
6. From the **Backends** tab:
    1. Select **Add a backend pool**.
    2. In the **Add a backend pool** window that opens, enter the following values to create an empty backend pool:
        1. For **Name**, enter an appropriate name for the name of the backend pool. (Example: *BackendPool1*)
        2. For **Add backend pool without targets**, select **Yes** to create a backend pool with no targets. You'll add backend targets after creating the application gateway and app

service.

3. Click **Add**
4. Click on **Next: Configuration**

3. From the **Configuration** tab
    1. Click **Add a routing rule** in the **Routing rules** column.
    2. In the **Add a routing rule** window that opens:
        1. For the **Rule name**, enter an appropriate rule name. (Example: *RoutingRule1*)
        2. For the **Priority**, enter 1
        3. On the **Listener** tab within the **Add a routing rule** window:
            1. For **Listener name**: Enter an appropriate listener name. (Example: *Listener*)
            2. For **Frontend IP Protocol**, select **Public** and **HTTP**
            3. For **Listener type**, select **Basic**
            4. For **Error page url**, select **No**



            4. On the **Backend Targets** tab within the **Add a routing rule** window:
                1. For **Target type**, select **Backend pool**
                2. For **Backend target**, select the backend pool that was created in the previous steps. (Example: *BackendPool1*)
                3. For **Backend settings**, click **Add new**
                4. In the **Add a Backend setting** popup window:
                    1. For **Backend settings name**, enter an appropriate name. (Example: *BackendSettings1*)
                    2. For **Backend protocol**, select **HTTP**
                    3. For **Backend port**, enter **80**
                    4. For **Cookie-based affinity**, select **Disable**
                    5. For **Connection draining**, select **Disable**
                    6. For **Request time-out (seconds)**, enter **20**
                    7. For **Override backend path**, leave blank
                    8. For **Override with new host name**, select **No**

9. Click **Add**

5. In the **Add a routing rule**, click **Add**

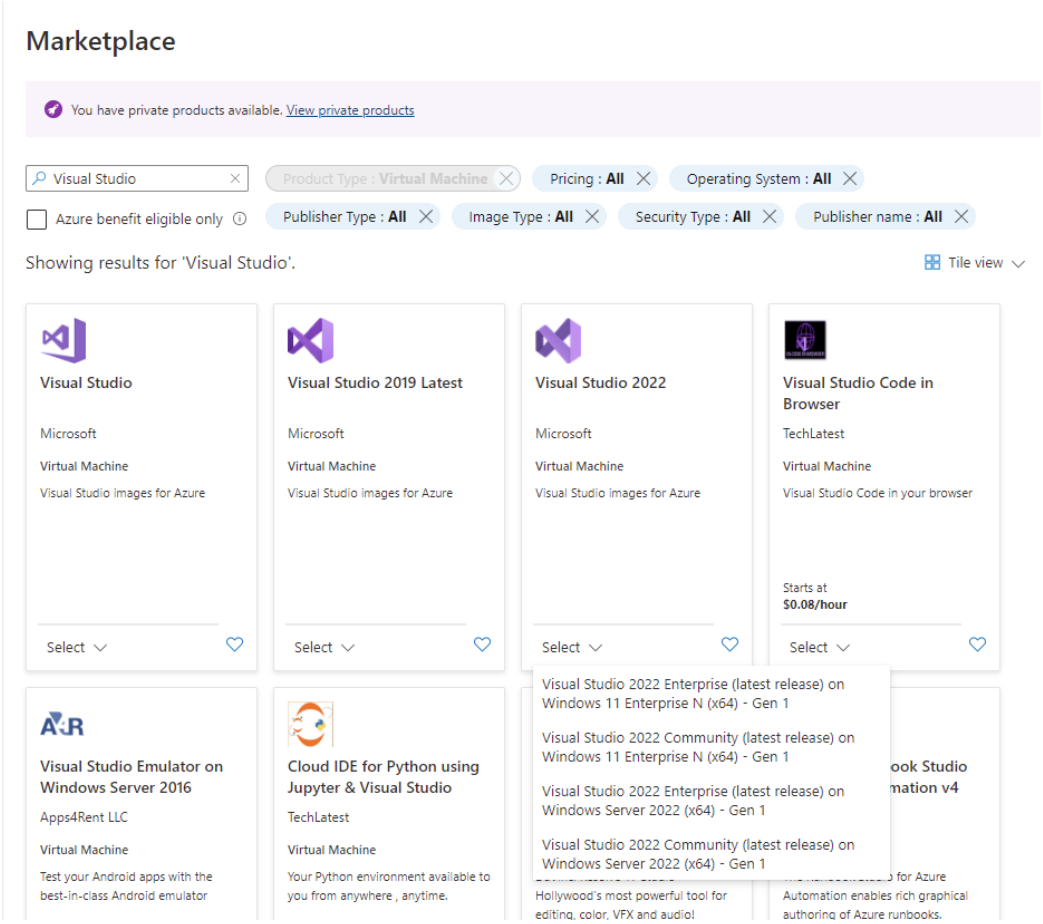
5. In the **Add a backend pool** window, select **Add** to save the backend pool configuration and return to the **Backends** tab.

3. Click on **Next: Tags**

4. From the **Tags** tab:
    1. Click on **Next: Review + Create >**
5. From the **Review + Create** tab:
    1. Click on **Create**

Exercise 2 - Create a Virtual Machine (Jumpbox) to access resources

1. On the Azure portal menu or from the **Home** page, select **Create a resource**.
2. In the **Search services and marketplace** search bar, search for **Virtual machine** or select **Virtual Machine** from the **Popular Azure services** menu.
3. Click on **Create**
4. Enter these values in the **Basics** tab for the following virtual machine settings:
    1. For **Subscription** and **Resource group**, select the resource group from previous exercises
    2. For **Virtual machine name**, enter a name for the name of the virtual machine.
    3. For **Region**, select the same region where you created the application gateway.
    4. For **Availability options**, select **No infrastructure redundancy required**
    5. For **Security type**, select **Standard**
    6. For **Image**, click on **See all images**
        1. From the **Select an image** window, in the **Search the Marketplace** search box, type in **Visual Studio**
        2. Select an appropriate VM image that includes Visual Studio (Example: *Visual Studio 2022 Community (latest release) on Windows 11 Enterprise N (x64) - Gen 1*)



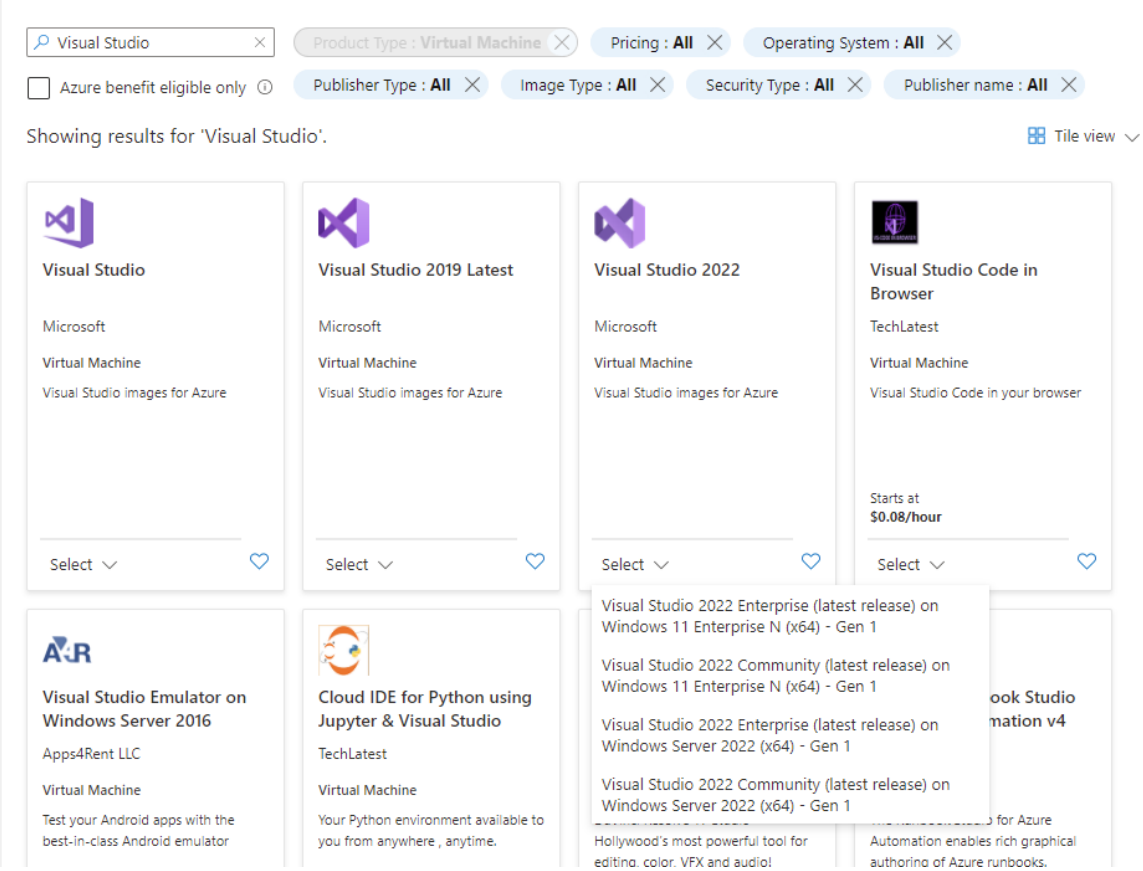
7. For **Azure Spot instance**, leave check box unchecked
8. For **Size**, select **Basic_A1** or another appropriate size.
9. For **Username**, type a name for the administrator user name.
10. For **Password**, type a password.
11. For **Public inbound ports**, select **None**.
12. Click on **Next: Disks**

5. Accept the **Disks** tab defaults and then select **Next: Networking**.
6. On the **Networking** tab:
    1. For **Virtual network**, select the virtual network created in Lab1.
    2. For **Subnet**, select the **default** subnet
    3. For **Public IP** select, none
    4. Accept the other defaults and then click **Next: Management**.
7. On the **Management** tab, set **Boot diagnostics** to **Disable**. Accept the other defaults and then click **Review + create**.
8. On the **Review + create** tab, click **Create**.

Exercise 3 - Create an App Service for a Web App in the ASEv3

NOTE: This exercise must be done after the App Service Environment has been created and fully deployed.

1. On the Azure portal menu or from the **Home** page, select **Create a resource**.
2. In the **Search services and marketplace** search bar, search for **Web App** or select **Web App** from the **Popular Azure services** menu.
3. Search for **Web App**



4. Select **Create** -> **Web App**
5. From the **Basics** tab of the **Create Web App** Wizard:
    1. Select the **Subscription** and **Resource Group** used in Lab 1
    2. For **Name**, enter a name. (Example: *webapp1*). NOTE: Because we will be adding this to our ASE in a later step, the name doesn't need to be globally unique, so you can ignore the *"The app name webapp1 is not available"* error if you get it.
    3. For **Publish**, select **Code**
    4. For **Runtime stack**, select **.NET 6 (LTS)**
    5. For Operating System, select **Windows**
    6. For **Region**, scroll to the top of the selection box and under **App Service Environment v3** select the ASEv3 created in Lab 1
    7. For **Windows Plan** you can keep the defaults shown.
    8. Click on **Next: Deployment**

6. From the **Deployment** tab:
    1. For **Continuous deployment**, select **Disable**
7. For the **Monitoring** tab:
    1. For **Enable Application Insights**, select **Yes**
    2. For **Application Insights**, click on **Create new**
    3. In the **Create new Application Insights** window:
        1. Type in a **Name**. (NOTE: We will use this Application Insights for other aspects of the ASE)
        2. For **Location** select the appropriate Location.
        3. Click on **OK**
        4. Click on **Create + Review**
    4. From the **Review + create** tab, check that your configuration is correct, and select **Create**.

NOTE: The App Service deployed into an ASE can take up to 30 minutes to create