

Activate Azure with App Service Environment

Student Lab Manual

Version 1.0

February 2022

Conditions and Terms of Use

Microsoft Confidential

This training package is proprietary and confidential, and is intended only for uses described in the training materials. Content and software is provided to you under a Non-Disclosure Agreement and cannot be distributed. Copying or disclosing all or any portion of the content and/or software included in such packages is strictly prohibited.

The contents of this package are for informational and training purposes only and are provided "as is" without warranty of any kind, whether express or implied, including but not limited to the implied warranties of merchantability, fitness for a particular purpose, and non-infringement.

Training package content, including URLs and other Internet Web site references, is subject to change without notice. Because Microsoft must respond to changing market conditions, the content should not be interpreted to be a commitment on the part of Microsoft, and Microsoft cannot guarantee the accuracy of any information presented after the date of publication. Unless otherwise noted, the companies, organizations, products, domain names, e-mail addresses, logos, people, places, and events depicted herein are fictitious, and no association with any real company, organization, product, domain name, e-mail address, logo, person, place, or event is intended or should be inferred.

© 2022 Microsoft Corporation. All rights reserved.

Copyright and Trademarks

© 2019 Microsoft Corporation. All rights reserved.

Microsoft may have patents, patent applications, trademarks, copyrights, or other intellectual property rights covering subject matter in this document. Except as expressly provided in written license agreement from Microsoft, the furnishing of this document does not give you any license to these patents, trademarks, copyrights, or other intellectual property.

Complying with all applicable copyright laws is the responsibility of the user. Without limiting the rights under copyright, no part of this document may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), or for any purpose, without the express written permission of Microsoft Corporation.

For more information, see Use of Microsoft Copyrighted Content at <http://www.microsoft.com/en-us/legal/intellectualproperty/Permissions/default.aspx>

Azure, Microsoft, MSDN, Microsoft Dynamics logo, Visual Studio, Visual Studio Design, 2019, Windows Server, and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. Other Microsoft products mentioned herein may be either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. All other trademarks are property of their respective owners.

Contents

Activate Azure with App Service Environment

Student Lab Manual

Contents

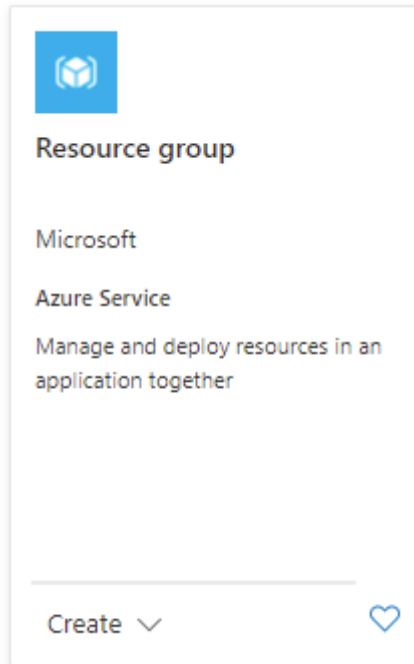
Exercise 1 - Create a Resource Group

Exercise 2 - Create a Virtual Network

Exercise 3 - Create a ILB App Service Environment v3

Exercise 1 - Create a Resource Group

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 **Resource Group**



3. Click on **Create**
4. From the **Basics** tab:
 1. For **Subscription**, select the appropriate subscription
 2. For **Resource Group**, give the resource group an appropriate name
 3. For **Region**, select an appropriate region
 4. Click on **Review + Create**
 5. Click on **Create**

Exercise 2 - Create a Virtual Network


1. On the Azure portal menu or from the **Home** page, select **Create a resource**.
2. Select **Networking** and then select **Virtual Network** -> **Create** in the **Popular Azure services** list or search for **Virtual Network** in the **Search services and marketplace** search bar.
3. From the **Basics** tab:
 1. For **Subscription**, select the appropriate subscription

2. For **Resource Group**, select the resource group created in Exercise 1
3. For **Name**, enter an appropriate name. (Example: vnet-asev3)
4. For **Region**, select the appropriate region
5. Click on **Next: IP Addresses**
4. From the **IP Addresses** tab:
 1. Create a subnet that will eventually hold the Application Gateway:
 1. Click on **+ Add subnet**
 2. In the **Subnet name** textbox, type in **appgw-subnet**
 3. In the **Subnet address range** textbox, type in an appropriate subnet, for example **10.2.1.0/24**
 4. Click on **Add**
 2. You should now have two subnets listed (**default** and **appgw-subnet**). If you do not have two, please add a second one following the steps above.

Basics **IP Addresses** Security Tags Review + create

The virtual network's address space, specified as one or more address prefixes in CIDR notation (e.g. 192.168.1.0/24).

IPv4 address space


10.2.0.0/16 ✓ 

☐ Add IPv6 address space ⓘ

The subnet's address range in CIDR notation (e.g. 192.168.1.0/24). It must be contained by the address space of the virtual network.

[+ Add subnet](#) [Remove subnet](#)

<input type="checkbox"/> Subnet name	Subnet address range	NAT gateway
<input type="checkbox"/> default	10.2.0.0/24	-
<input type="checkbox"/> appgw-subnet	10.2.1.0/24	-

i Use of a NAT gateway is recommended for outbound internet access from a subnet. You can deploy a NAT gateway and assign it to a subnet after you create the virtual network. [Learn more](#) 

3. Click on **Review + Create**
5. Click on **Create**

Exercise 3 - Create a ILB App Service Environment v3


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 **App Service Environment v3**
3. Click **Create**
4. From the **Basics** tab:

1. For **Subscription**, select the appropriate subscription.
2. For **Resource Group**, select the resource group created in Exercise 1
3. For **App Service Environment Name**, enter an appropriate name. NOTE: Ensure this name is globally unique.
4. For **Virtual IP**, select **Internal**
5. Click on **Next: Hosting**

[Home](#) >

App Service Environment v3 ...

Basics Hosting Networking Tags Review + create

The App Service Environment is a single-tenant deployment of the Azure App Service in your own virtual network. The apps in an App Service Environment can access resources in or through your virtual network without additional configuration. Network security can be applied around the App Service Environment and does not need to be configured on each app. [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

The name of the App Service Environment is used in the domain suffix that apps are created with. The Virtual IP Type determines if your apps are internet accessible or only accessible from the virtual network the App Service Environment is deployed into.

App Service Environment Name * ⓘ

App Service Environment Name

.appserviceenvironment.net

Virtual IP

☒ **Internal:** The endpoint is an internal load balancer (ILB ASE)

☐ **External:** Exposes the ASE-hosted apps on an internet-accessible IP address

Review + create

< Previous

Next : Hosting >

3. From the **Hosting** tab:

1. For **Physical hardware isolation**, select **Disabled**.
2. For **Zone redundancy**, select **Disabled**.
3. Click on **Next: Networking**


[Home](#) > [Create a resource](#) > [App Service Environment v3](#) >

Create App Service Environment v3 ...

Basics Hosting Networking Tags Review + create

Zone redundancy is not available with physical hardware isolation.


Hardware isolation

App Service Environments can be deployed with physical hardware isolation for an additional charge. [Learn more](#) 

Physical hardware isolation

- ☐ **Enabled:** Your App Service Environment will be hosted on two dedicated physical hosts.
- ☒ **Disabled:** Your App Service Environment will be hosted on virtual isolated hardware.

Zone redundancy

An App Service Environment can be deployed as a zone redundant service in the regions that support it. This is a deployment time only decision. Changing zone redundancy is not possible after it has been deployed. [Learn more](#) 

Zone redundancy


- ☐ **Enabled:** Your App Service Environment and the apps in it will be zone redundant. The minimum App Service plan instance count will be three.
- ☒ **Disabled:** Your App Service Environment and the apps in it will not be zone redundant. The minimum App Service plan instance count will be one.

4. From the **Networking** tab

1. For **Virtual Network**, select the virtual network created in Exercise 2.
2. For **Subnet**, click on **Create new**.
 1. For **Subnet Name**, enter an appropriate subnet name (Example: ase-subnet)
 2. Click **OK**
3. For **DNS**, select **Azure DNS Private zone**.
4. Click on **Review + Create**

Create App Service Environment v3 ...


Basics Hosting Networking Tags Review + create

An App Service Environment is a deployment of Azure App Service into a subnet in your Azure Virtual Network (VNet). [Learn more](#) 

Virtual Network * 

vnet-ase-0223

[Create new](#)


 App Service Environment is deployed into a single subnet in your VNet. The subnet needs to be empty and recommended size is /24 with 256 addresses. It is not allowed to be deployed into a subnet size of /29 or above.

Subnet * 

(New) ase-subnet

[Create new](#)

DNS

☒ **Azure DNS Private zone:** Create and link my ASE to an Azure DNS private zone. [Learn more](#) 

☐ **Manual:** I will provide my own custom DNS solution.

5. From the **Review + create** tab, click on **Create**.

NOTE: The creation of an ASEv3 can take 2 to 3 hours.