# Goal

Create an AKS cluster in a VNet.

# Steps

## Login to your Azure Subscription

1. Login to the Azure Portal

Go to http://portal.azure.com and login using the credentials provided.

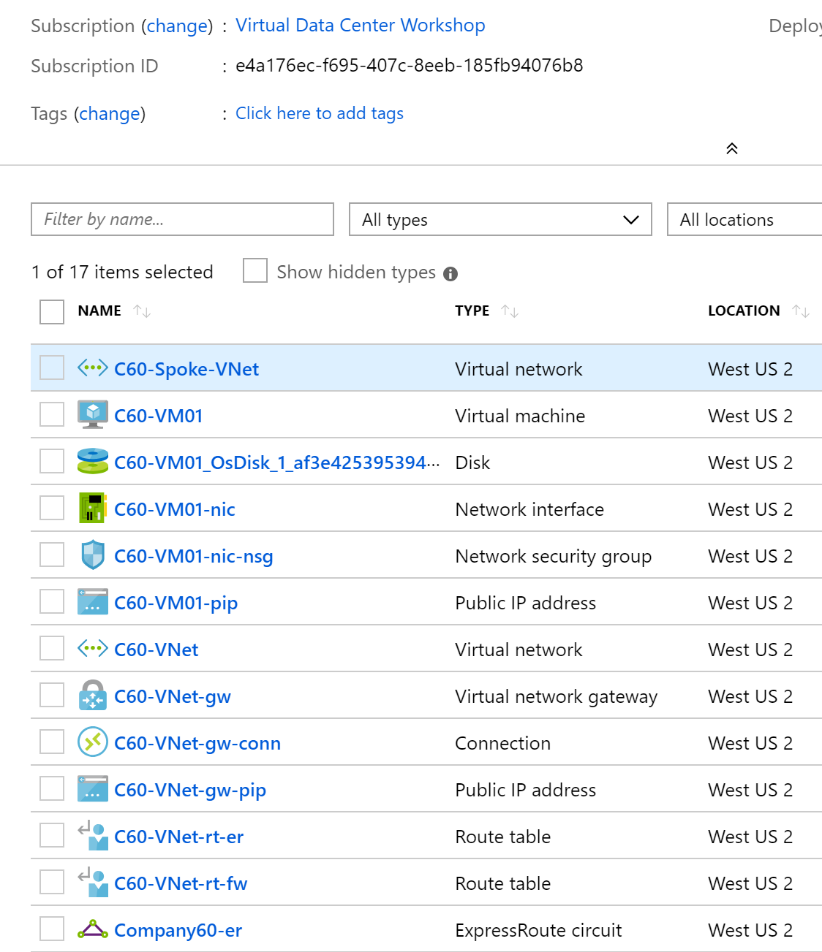
After logging on click on “Resource Groups” menu option on the left. You will see a Resource Group (RG) pre-created for you with name “Company\*”. ‘\*’ is your company number.

**Make a note of your company number. You will use this number to create resources throughout the workshop.**

Click on the RG to see all the resources in it. You will see two VNets. The “C\*-VNet” is the hub VNet which contains the ER Gateway and Firewall deployment. The “C\*-Spoke-VNet” is a spoke VNet peered to the hub and is where you will deploy the cluster.

Resources in these VNets have names beginning with “C\*” and “C\*-Spoke” respectively.

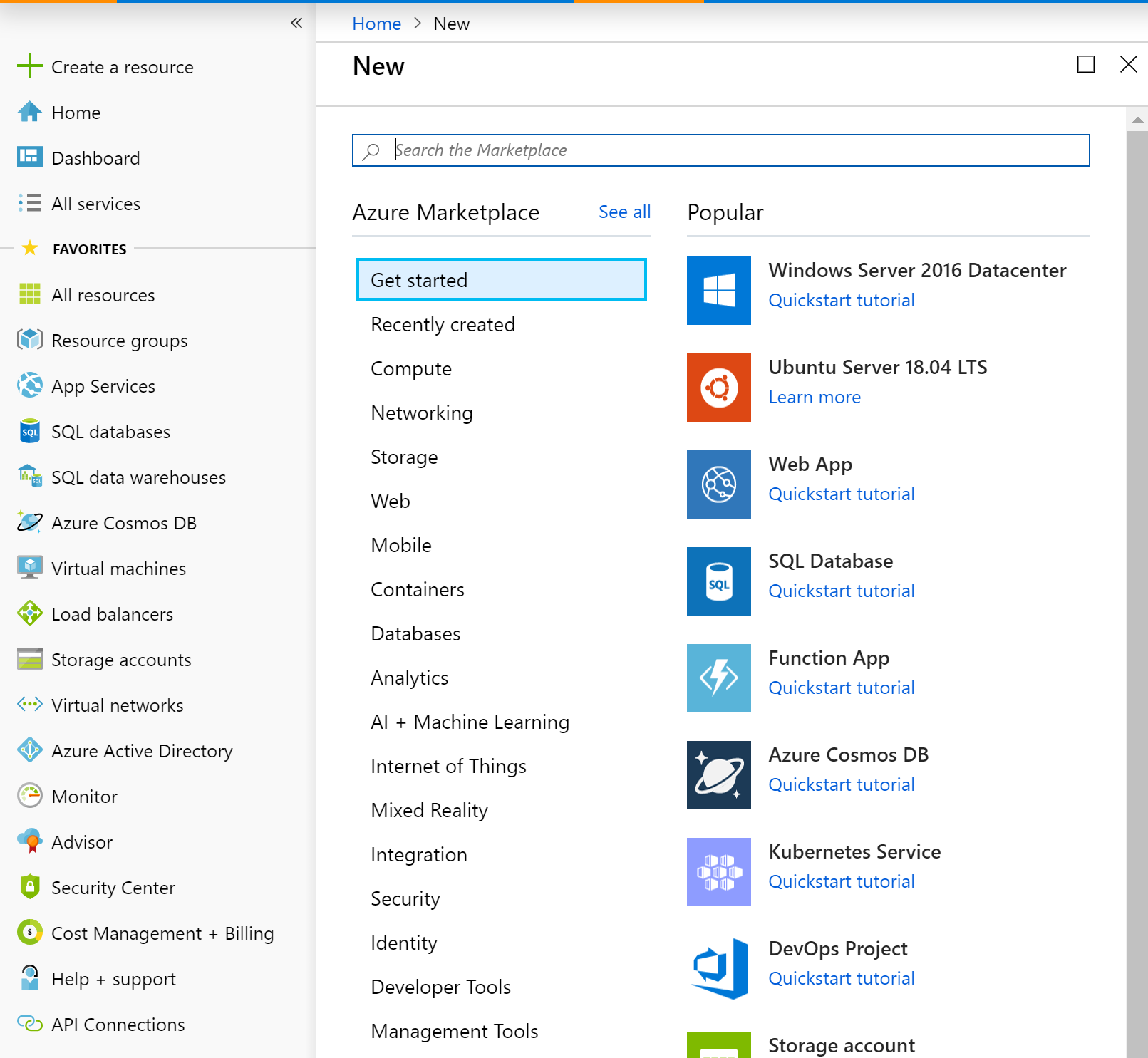
Below is a snapshot of Company60



## Create a Cluster

**Note: In all these instructions replace ‘\*’ in the resource names with your company no**

1. We will deploy the cluster through the portal. On your portal dashboard click on the “Create a resource” option and choose “Kubernetes Service” from the list of Popular resources. This brings up the wizard to create an AKS cluster



1. Basics tab of the Wizard

In the Basics tab provide the following values

Subscription and Resource Group: Choose the single option you see for each of them

Kubernetes Cluster Name: Specify “C\*-Spoke-Cluster”, where \* is your company number

Region: Choose (US) US West 2

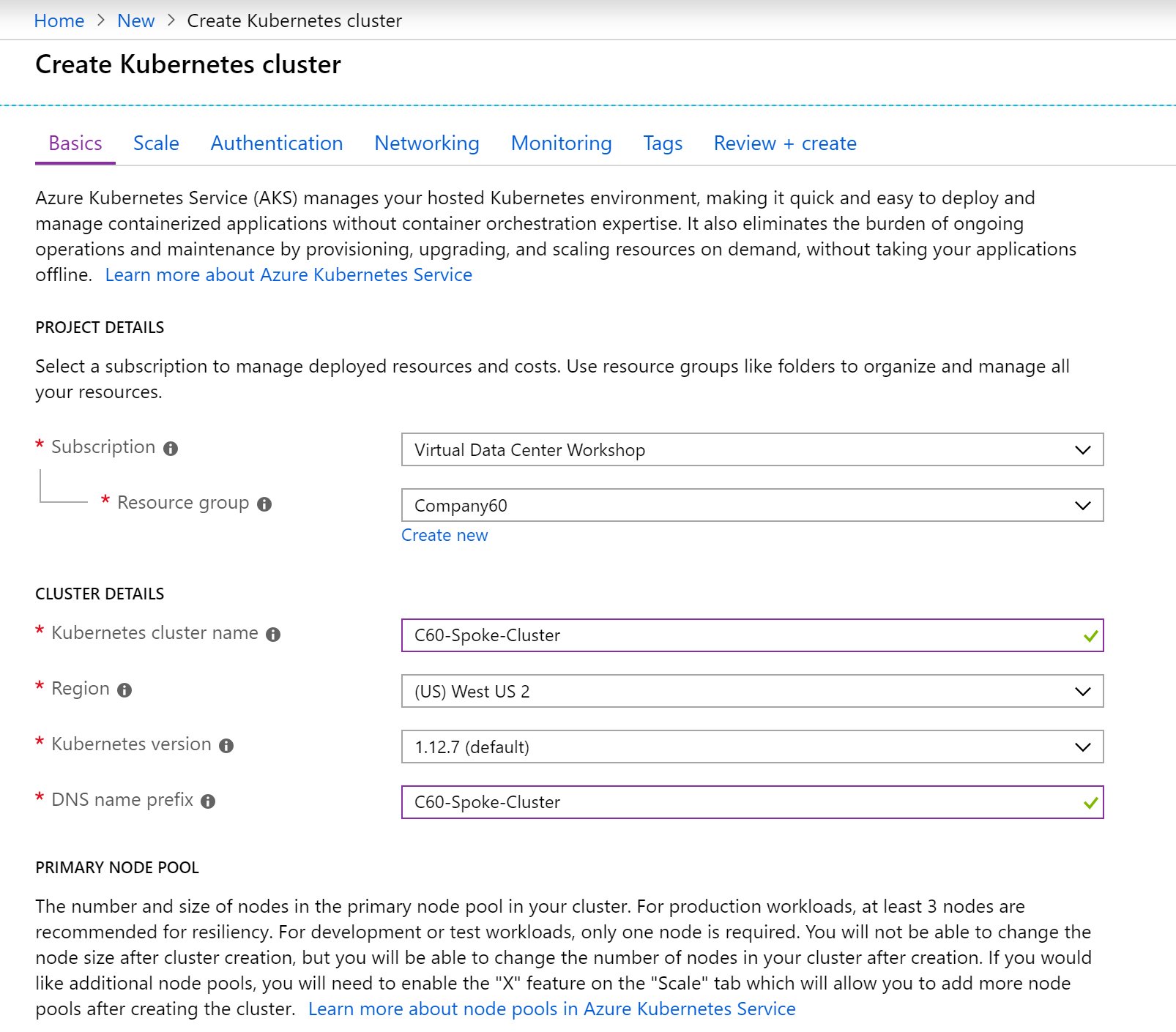
Kubernetes Version: Leave it at default

DNS name prefix: Use the same value as the Kubernetes Cluster Name, viz. “C\*-Spoke-Cluster”

Primary Node Pool: Leave these settings at default

After entering these values click “Next: Scale”

Below is a sample screenshot for Company60



1. Scale tab of the Wizard

Leave the values unchanged. Click on “Next: Authentication”

1. Authentication tab of the Wizard

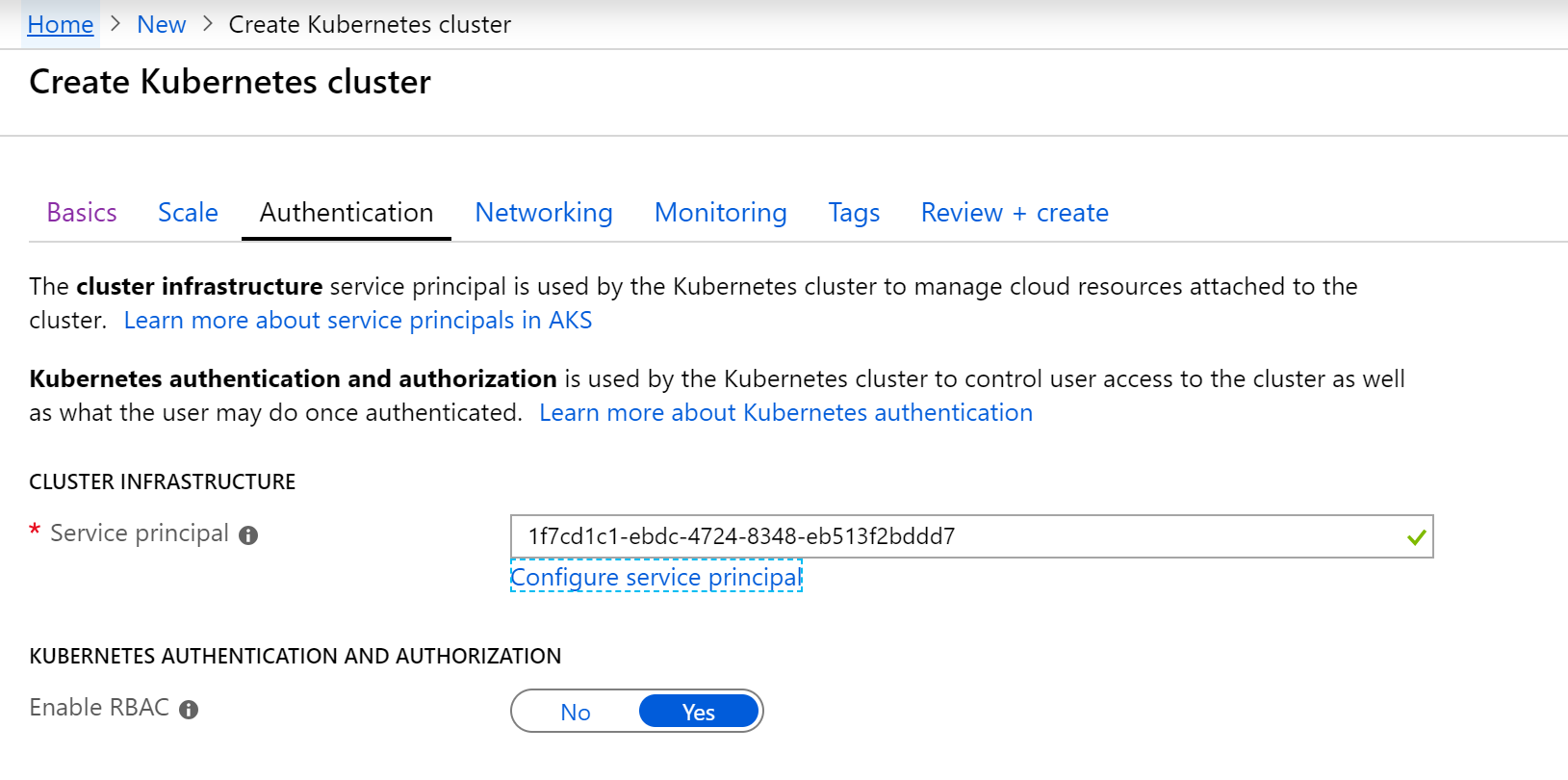
You specify the Service Principal here. Click on the “Configure Service Principal” link below the Service Principal text box. In the blade that comes up select “Use Existing” and enter the following values. Then click Ok

Service principal client ID: 1f7cd1c1-ebdc-4724-8348-eb513f2bddd7

Service principal client secret: +KR73NUhYuf1AuPotU?6.Q?ip3Q\*mu=c

Leave the value of “Enable RBAC” unchanged. Then click “Next: Networking”

Below is a sample screenshot for Company60



1. Networking tab of the Wizard

Leave the “HTTP application routing” setting unchanged

Select the “Advanced” option for Network configuration and provide the following values

Virtual network: Choose the spoke VNet, viz. “C\*-Spoke-VNet”

Cluster subnet: Choose the subnet named “Cluster” in the spoke VNet

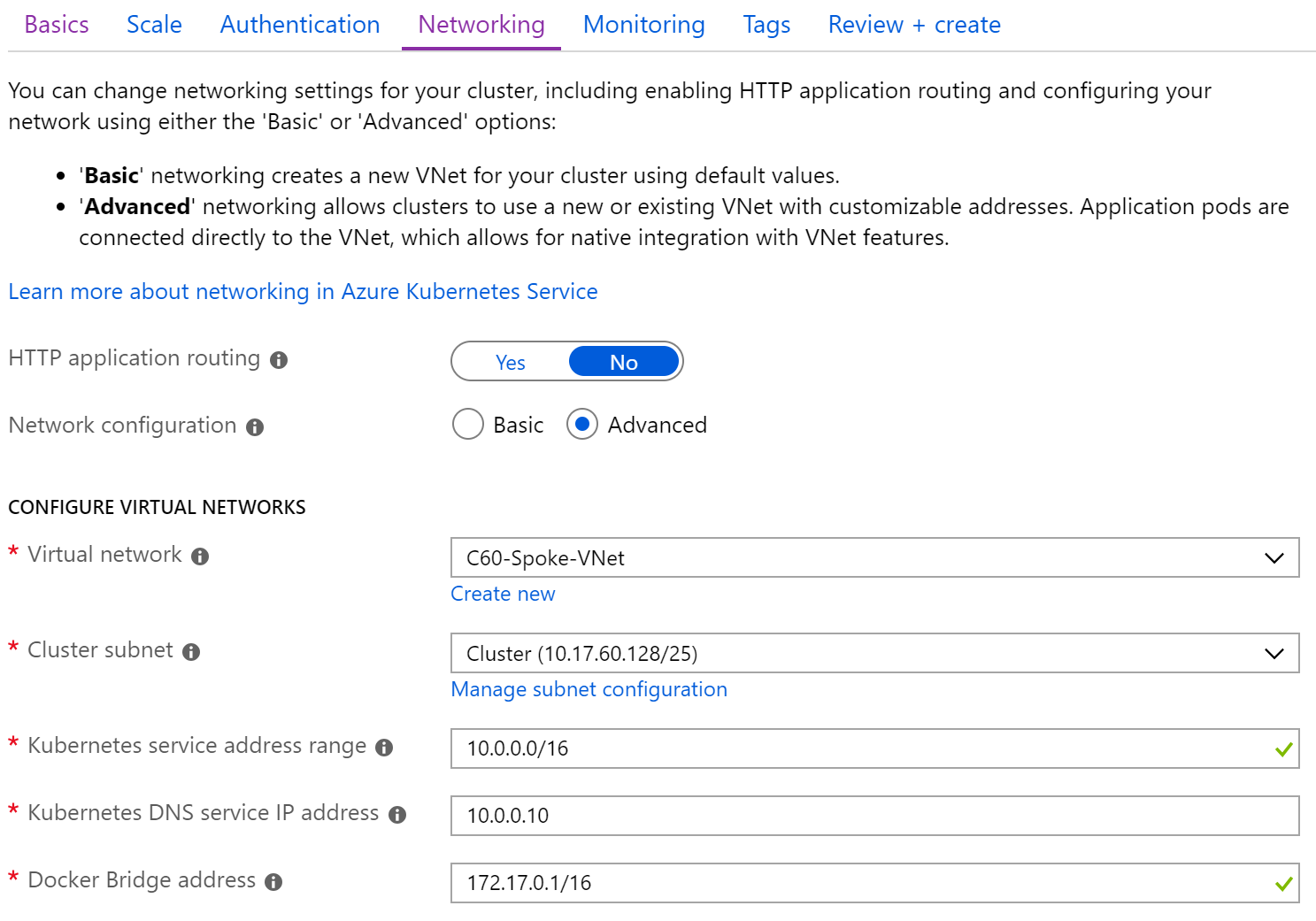
Kubernetes service address range: Specify 11.0.0.0/16

Kubernetes DNS service IP address: Specify 11.0.0.10

Docker Bridge address: Leave it at default

Then click “Next: Monitoring”

Below is a sample screenshot for Company60



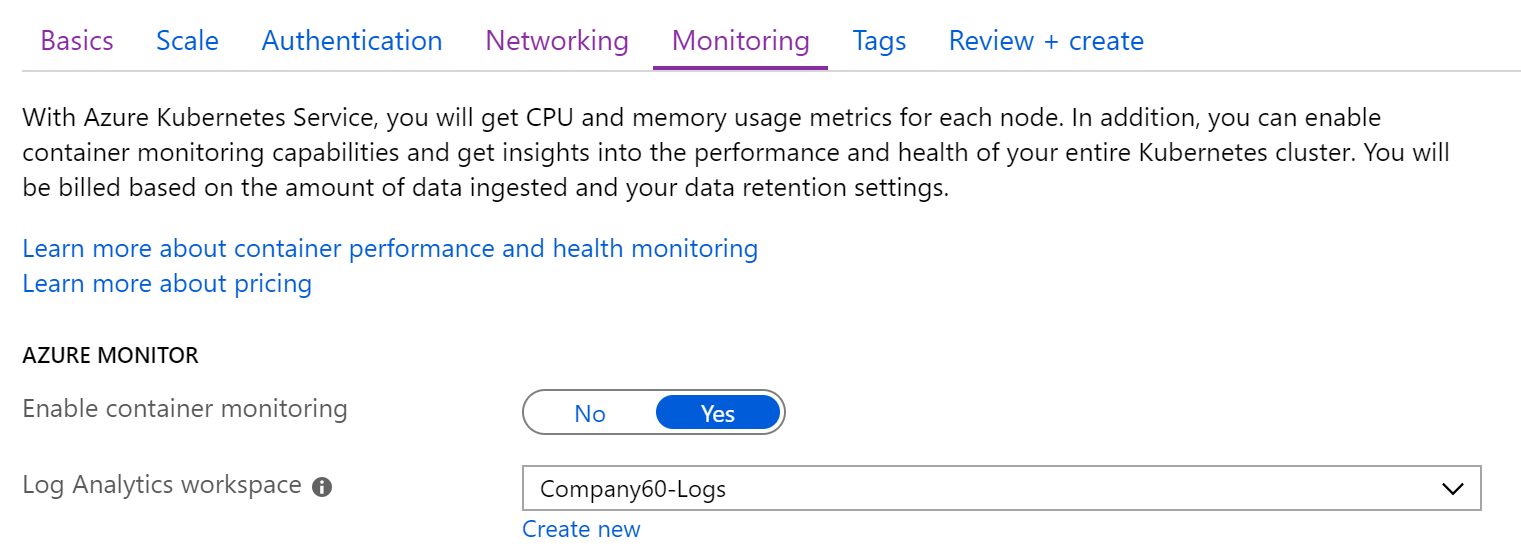
1. Monitoring tab of the Wizard

Keep container monitoring enabled

In the Long Analytics workspace drop-down select your workspace, viz. Company\*-Logs.

Then click “Next: Tags”

Below is a sample screenshot for Company60



1. Tags tab of the Wizard

Do not specify any values. Click on “Next: Review + create”

1. Create tab of the Wizard

Validation of all the specified settings must pass. After that click on “Create”. This will start cluster creation which can take up to 15 mins or so. During the deployment you will see a blade that displays start time, duration etc.

## Verifying the Cluster

Once the cluster is created you will see it in the list of resources in the Resource Group blade. There is another

# Setup CLI Environment

You will be using CLI for the rest of the labs. Complete the following steps to set it up

1. Open Windows *cmd* prompt
2. Login through CLI

Login through CLI by running the following command. This will open up the web browser where you will enter the credentials provided and login to Azure

az login

1. Intall *kubectl* and the Credentials to connect to your Cluster

//Install KubeCtl. This is the K8S command line tool to manage your cluster

//Plumb the credentials required to connect to your cluster