Create the Virtual Network and Virtual Network gateway 1

Create our virtual networks in two different regions according the instructions files.

1. Log in to the Azure portal at https://portal.azure.com.

Step 1 – Create Resource Group for VNET-1

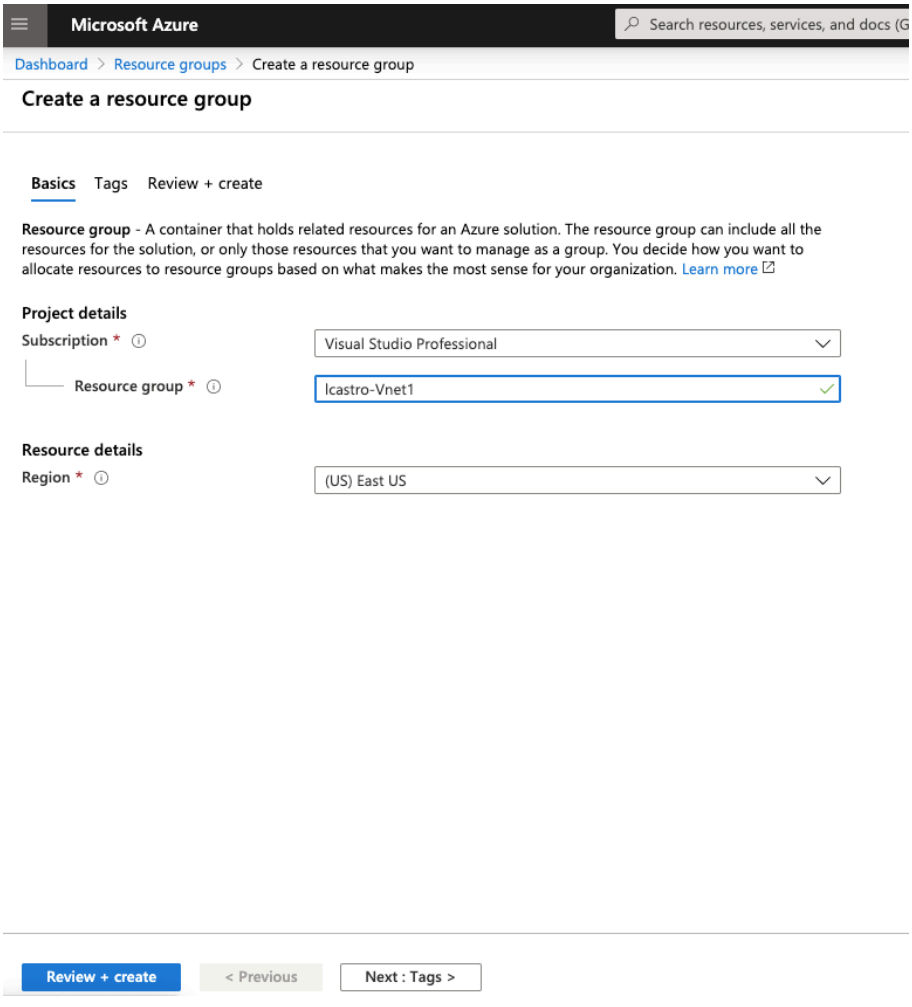
Select the **Resource Groups** menu item (which will open the Resource Groups blade) and then select **Add**.

Create a new resource group in the region for VNET1

- username-VNET1
- Eg: lcastro-VNET1

Add the defined Region for VNET1

Click the **Create** button.



Step 2 – Create Resource Group for VNET-2

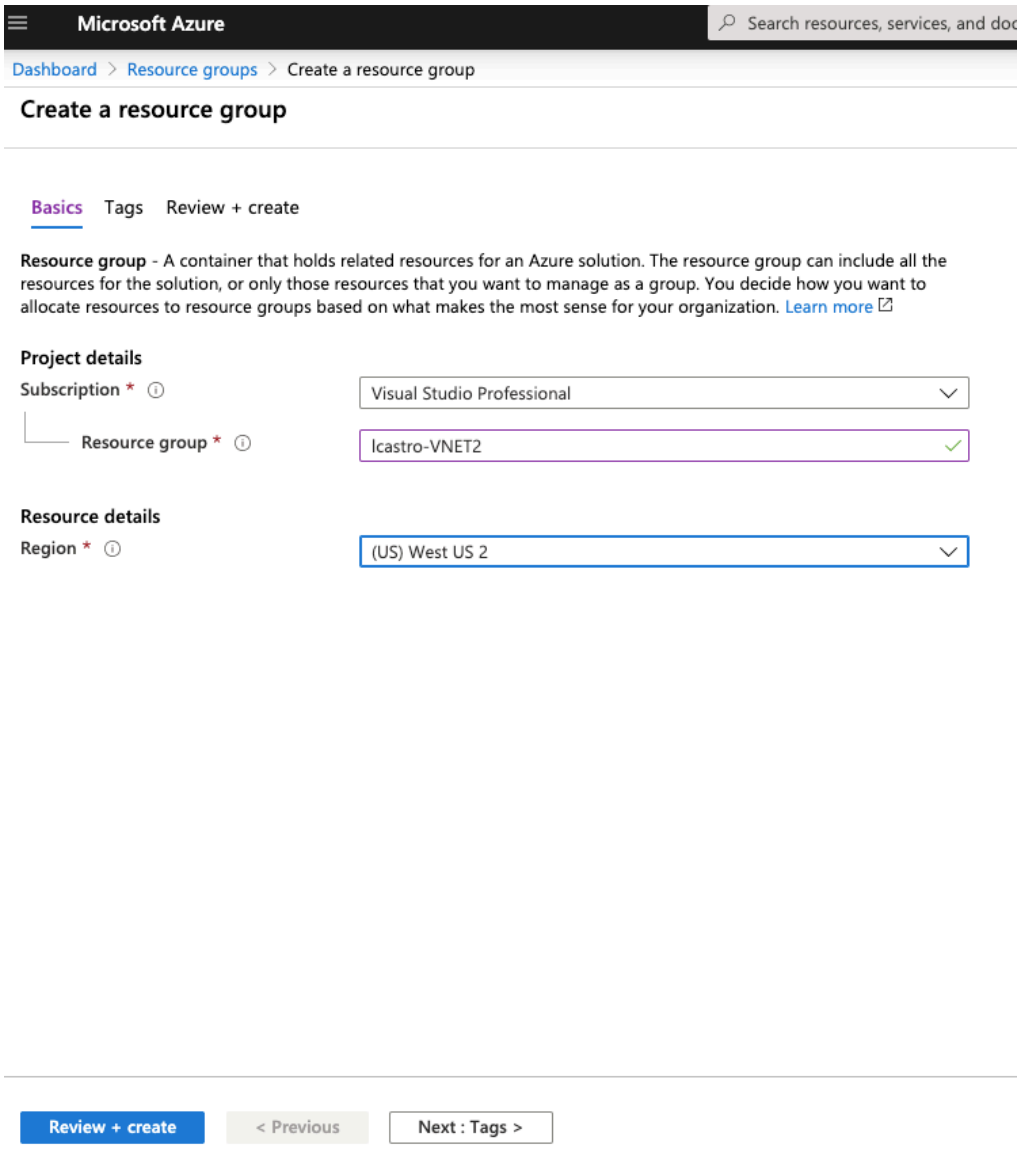
Select the **Resource Groups** menu item (which will open the Resource Groups blade) and then select **Add**.

Create a new resource group in the region for VNET1

- username-VNET2
- Eg: lcastro-VNET2

Add the defined Region for VNET2

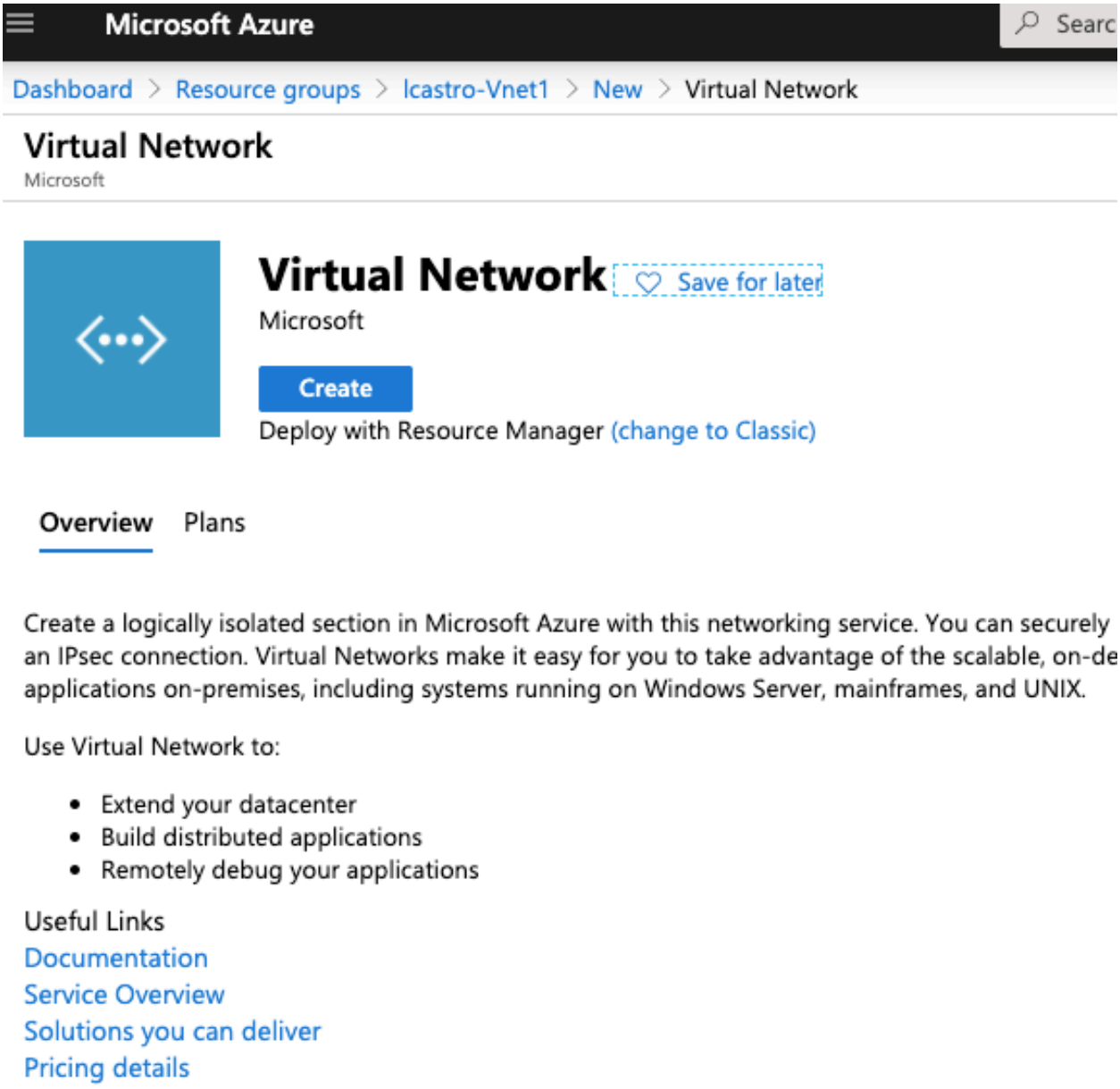
Click the **Create** button.



Step 3 - Create Virtual Network VNET-1

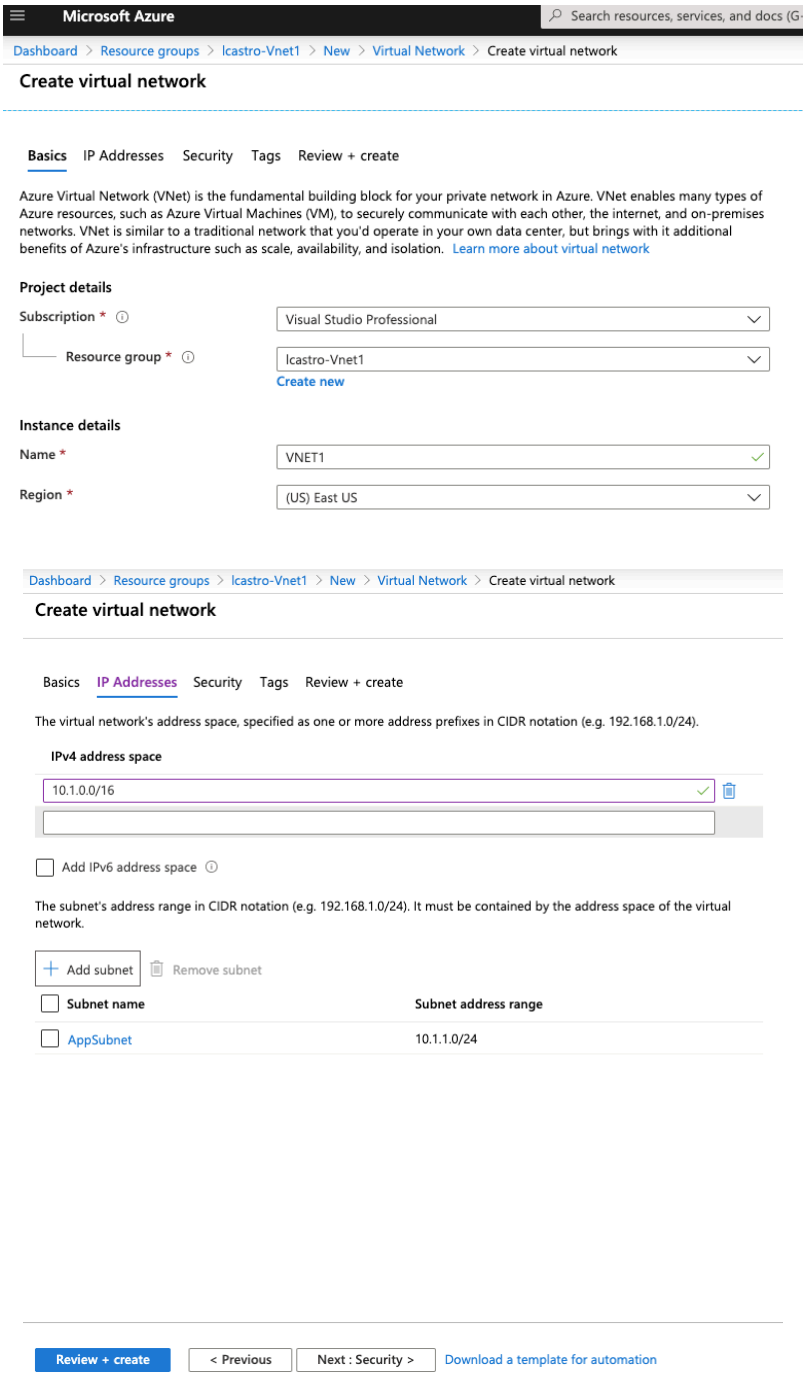
1. Go back to the Resource Groups blade and pick **VNET1**. This will open up the resource group blade.

2. Create a new virtual network by selecting **Create**



3. Select the Resource Group create for VNET1 then name the virtual network **VNET1**.

4. For the address range, enter the IP **10.1.0.0/16**, with a subnet name of **AppSubnet**. The subnet IP address should be **10.1.1.0/24**.



Step 4 - Virtual Gateway Subnet VNET1

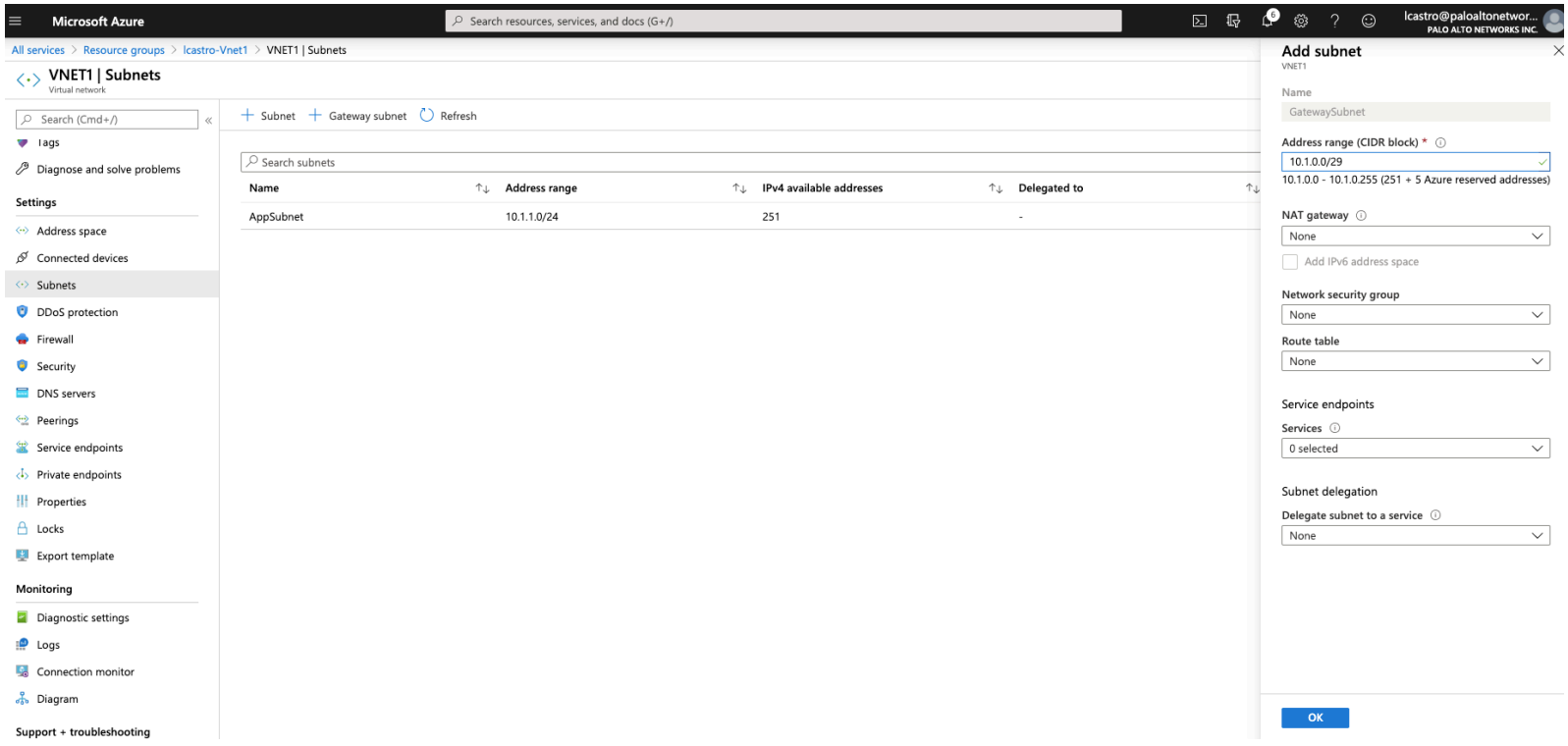
Once the virtual network has been created, create a new subnet that will be used as the gateway.
We need to add a 'gateway subnet'. When a virtual network gateway is created, Azure will create virtual machines that will act as a load balanced public IP gateway for another network to connect to.

The subnet MUST be named **GatewaySubnet** and the CIDR block MUST be **/29**. Notice here that we are starting with the IP addresses that are left within the virtual networks address range. Click the **OK** button. Once the new subnet has been created, go back to the rgEast resource group blade.

Go to VNET1>Subnets>Add Gateway Subnet

Address Range: 10.1.0.0/29

Click Ok

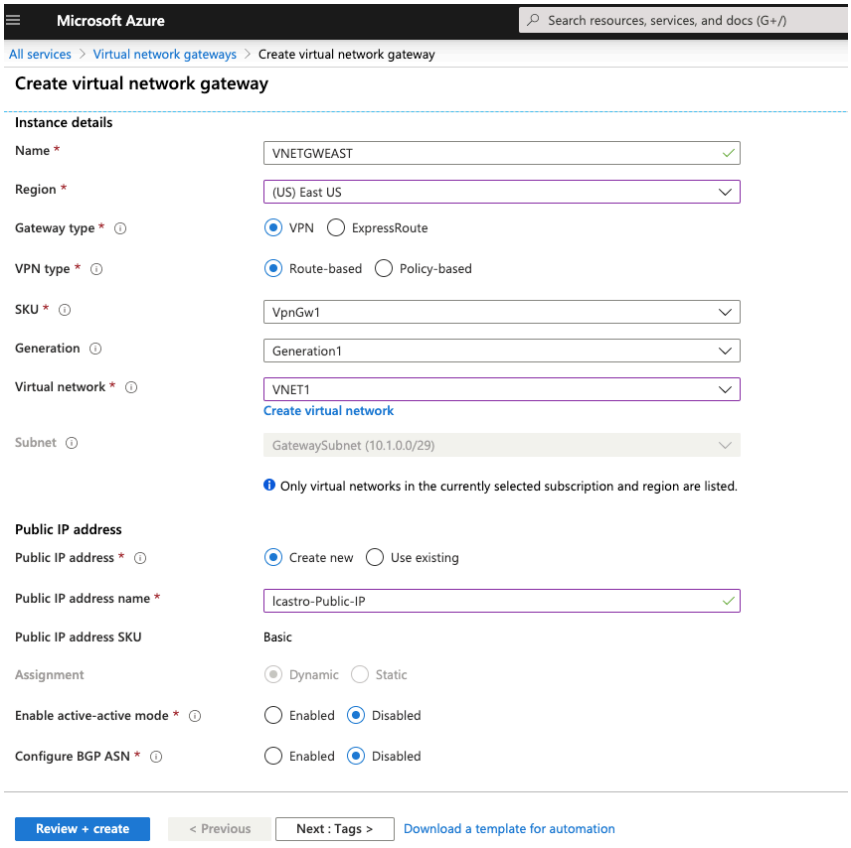


Step 4 - Virtual Network Gateway VNET1

In order for our virtual network to connect to another network (virtual or otherwise), it needs to have a virtual network gateway. This gateway represents a public IP address that that can be connected to.

Click the Add button and then type in *virtual network gateway* into the Everything blade. Then select the **Virtual Network gateway** list item. Click the **Create** button.

- **Name:**
  - VNETGW<Region VNET1>
    - Eg: VNETGWEAST
- Choose Region for **VNET1**
- Click on the Virtual Network link and choose **VNET1**
- Public IP address
  - <username>-Public-IP
    - Eg: lcastro-Public-IP
- Choose **Route-based** for the VPN type
- Click **Review and Create**



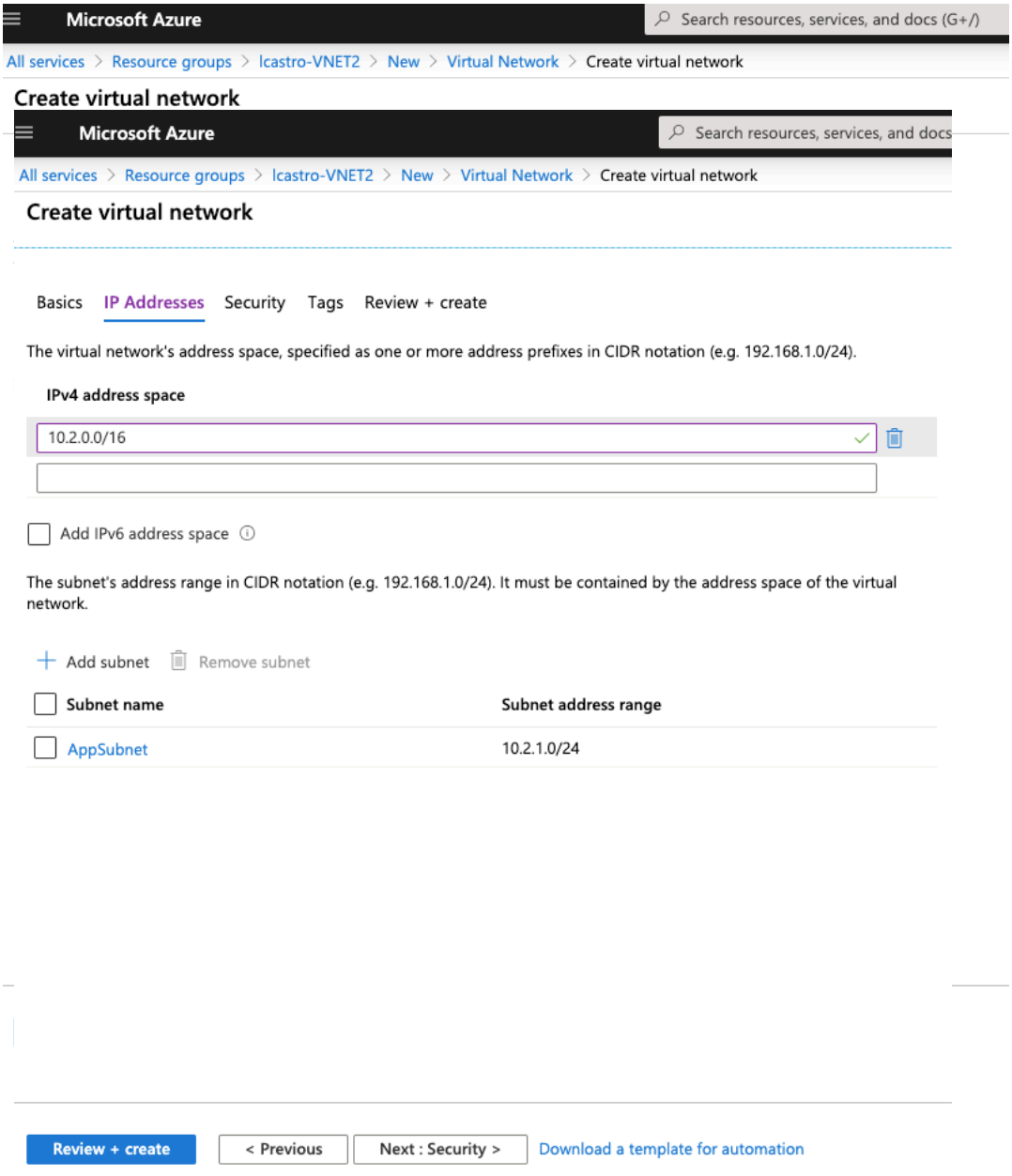
Step 5 – Create Virtual Network VNET-2

1. Go back to the Resource Groups blade and pick **VNET2**. This will open up the resource group blade.

2. Create a new virtual network by selecting **Create**

3. Select the Resource Group create for VNET2 then name the virtual network **VNET**.

4. For the address range, enter the IP **10.2.0.0/16**, with a subnet name of **AppSubnet**. The subnet IP address should be **10.2.1.0/24**.



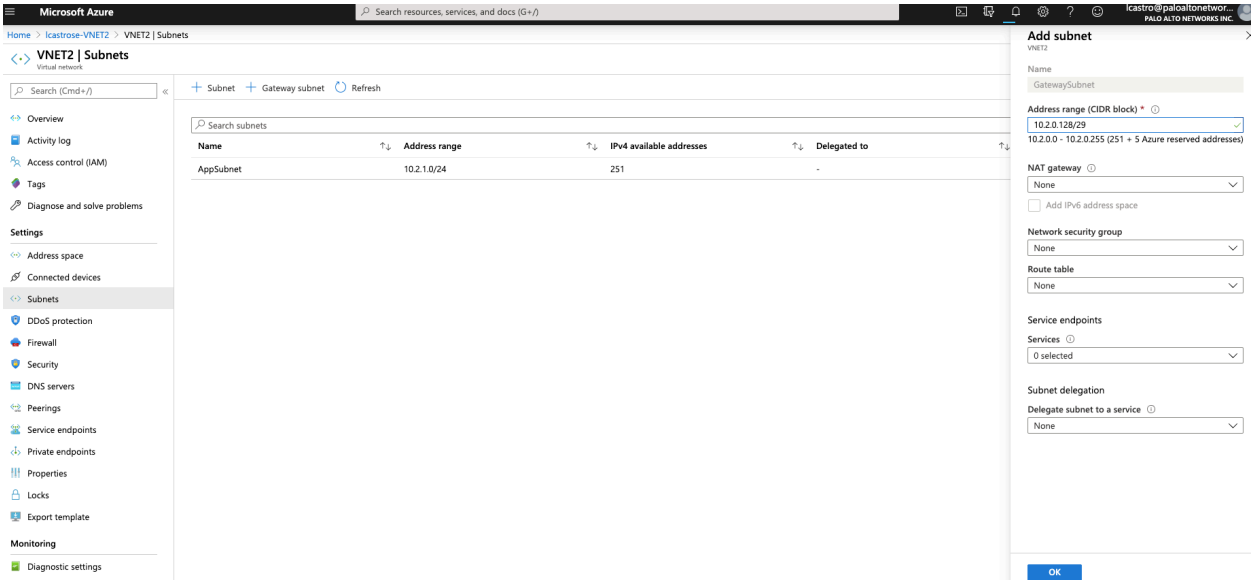
Step 6 – Create Virtual Gateway Subnet VNET-2

Once the virtual network has been created, create a new subnet that will be used as the gateway.

Go to VNET2>Subnets>Add Gateway Subnet

Address Range: 10.2.0.0/29

Click Ok

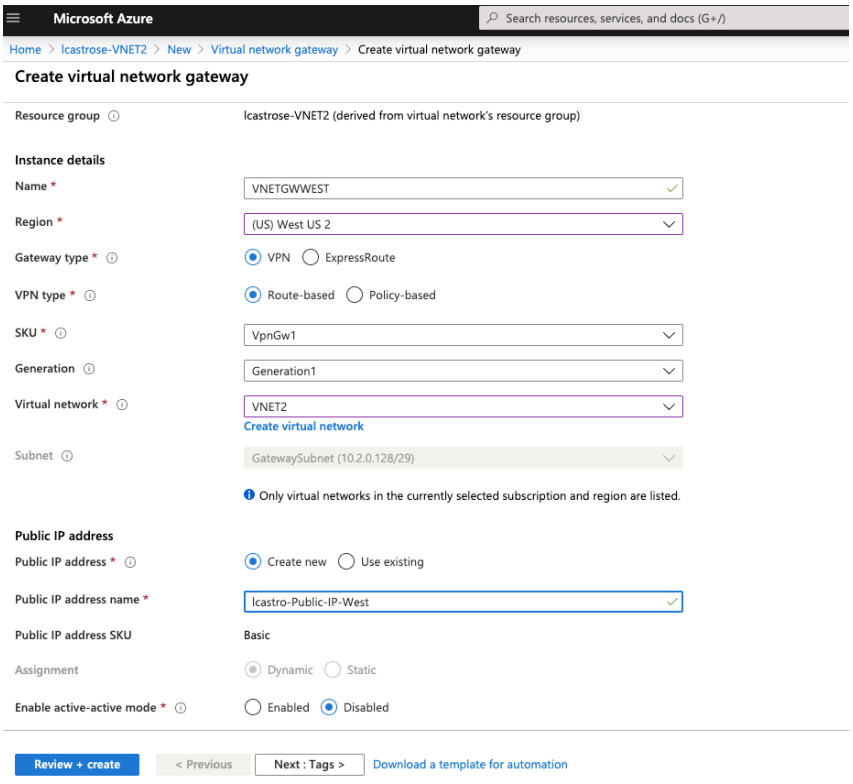


Step 7 Virtual Network Gateway

In order for our virtual network to connect to another network (virtual or otherwise), it needs to have a virtual network gateway. This gateway represents a public IP address that that can be connected to.

Click the Add button and then type in *virtual network gateway* into the Everything blade. Then select the **Virtual Network gateway** list item. Click the **Create** button.

- **Name:**
  - VNETGW<Region VNET2>
    - Eg: VNETGWWEST
- Choose Region for **VNET2**
- Click on the Virtual Network link and choose **VNET2**
- Public IP address
  - <username>-Public-IP
    - Eg: lcastro-Public-IP-West
- Choose **Route-based** for the VPN type
- Click **Review and Create**

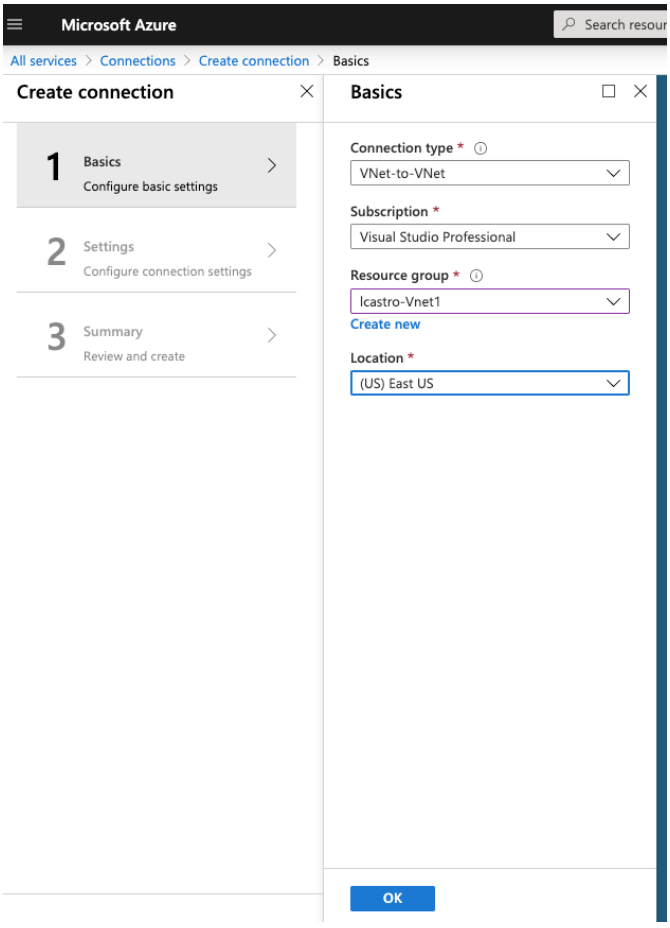


Step 8 - Azure Connection VNET1

Now that you have the virtual network gateways created, you need to create Azure Connections so that the gateways can connect together.

It does not matter which resource group you start with, since both resource groups/virtual network connections will require an Azure Connection.

1. From within the **VNET1** resource group blade, select **Add** and then enter connection and select Connection in the Everything blade. Select the **Create** button.



Connection Settings

First Virtual Network Gateway:
- VNETGWEAST

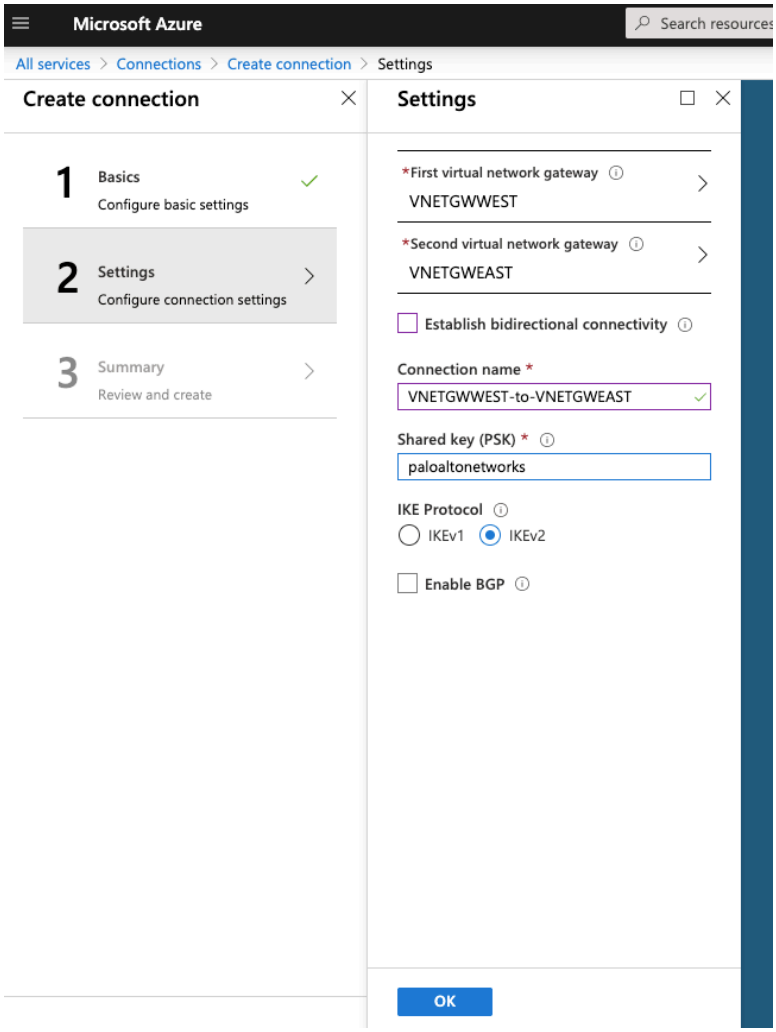
Second Virtual Networks Gateway
- VNETGWWEST

Deselect
- Establish bidirectional connectivity

Connection Name
- VNETGWEAST-toVNETGWWEST

Shared Key (PSK)
- paloaltonetworks

Create

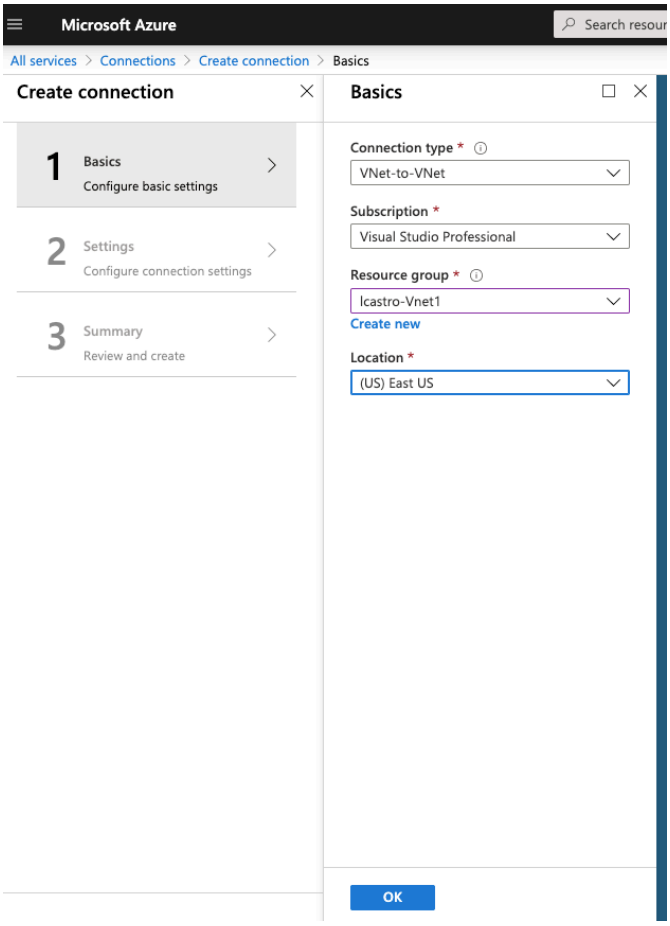


Step 9 - Azure Connection VNET2

Now that you have the virtual network gateways created, you need to create Azure Connections so that the gateways can connect together.

It does not matter which resource group you start with, since both resource groups/virtual network connections will require an Azure Connection.

1. From within the **VNET2** resource group blade, select **Add** and then enter connection and select Connection in the Everything blade. Select the **Create** button.



Connection Settings

First Virtual Network Gateway:
- VNETGWWEST

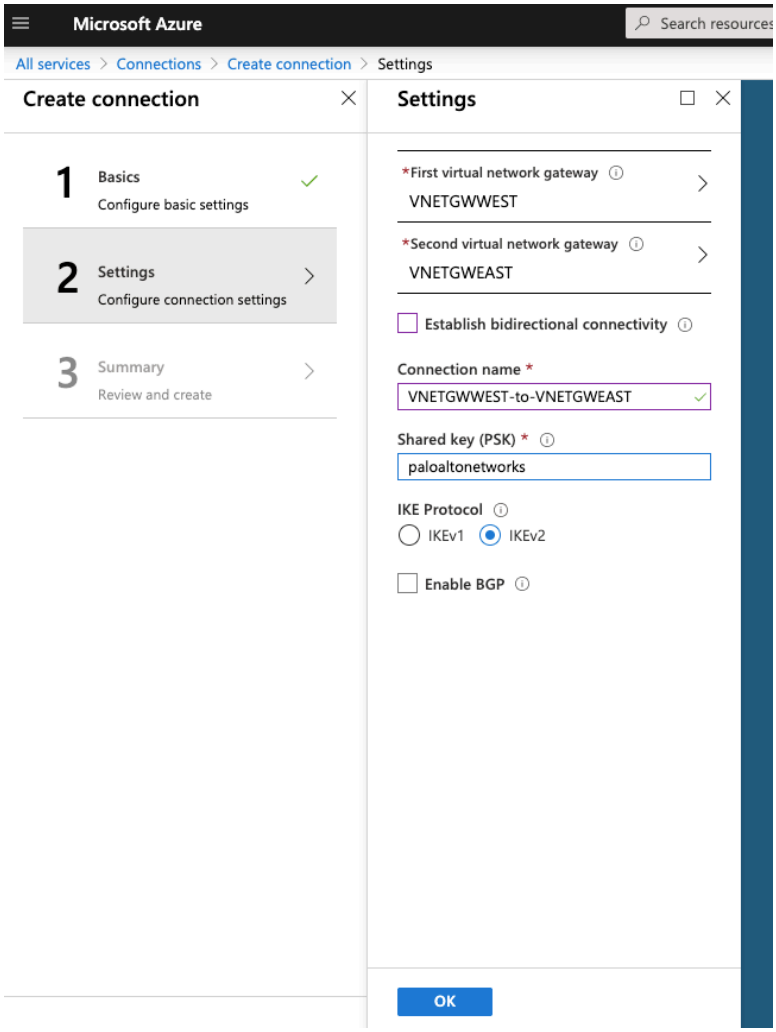
Second Virtual Networks Gateway
- VNETGWEAST

Deselect
- Establish bidirectional connectivity

Connection Name
- VNETGWWEST-to-VNETGWEAST

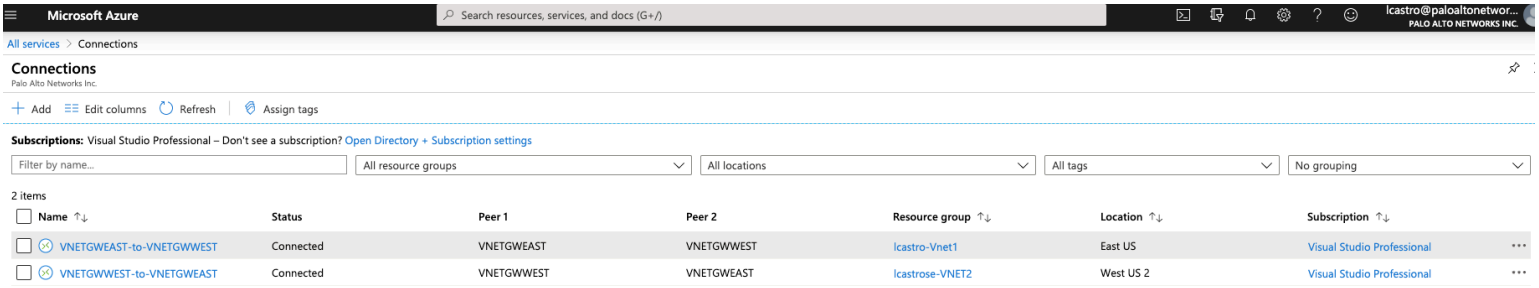
Shared Key (PSK)
- paloaltonetworks

Create



Step 10 - Validate Connections

Go to Connections



Go inside any of the two connections and click to check Gateways and IPs