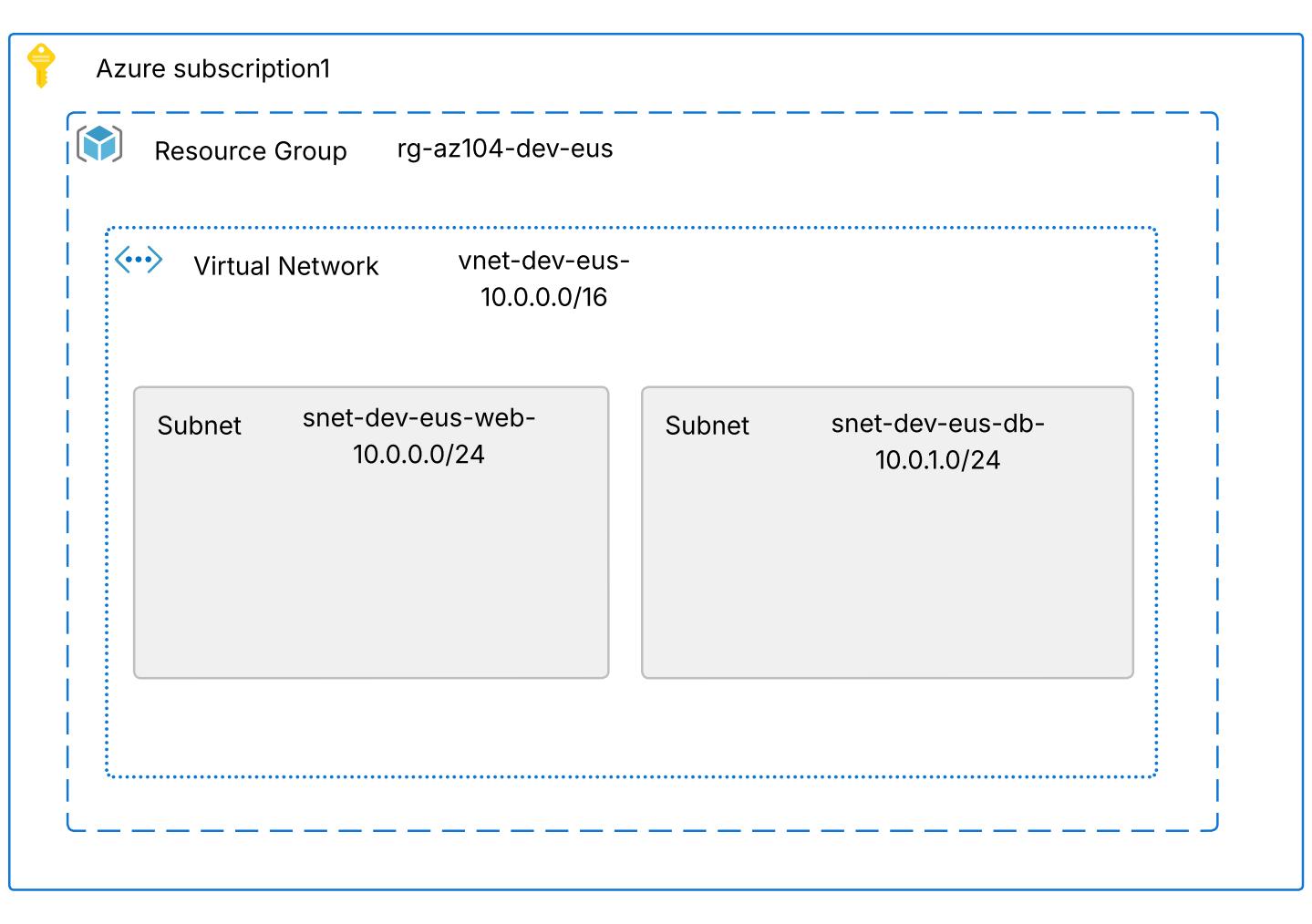
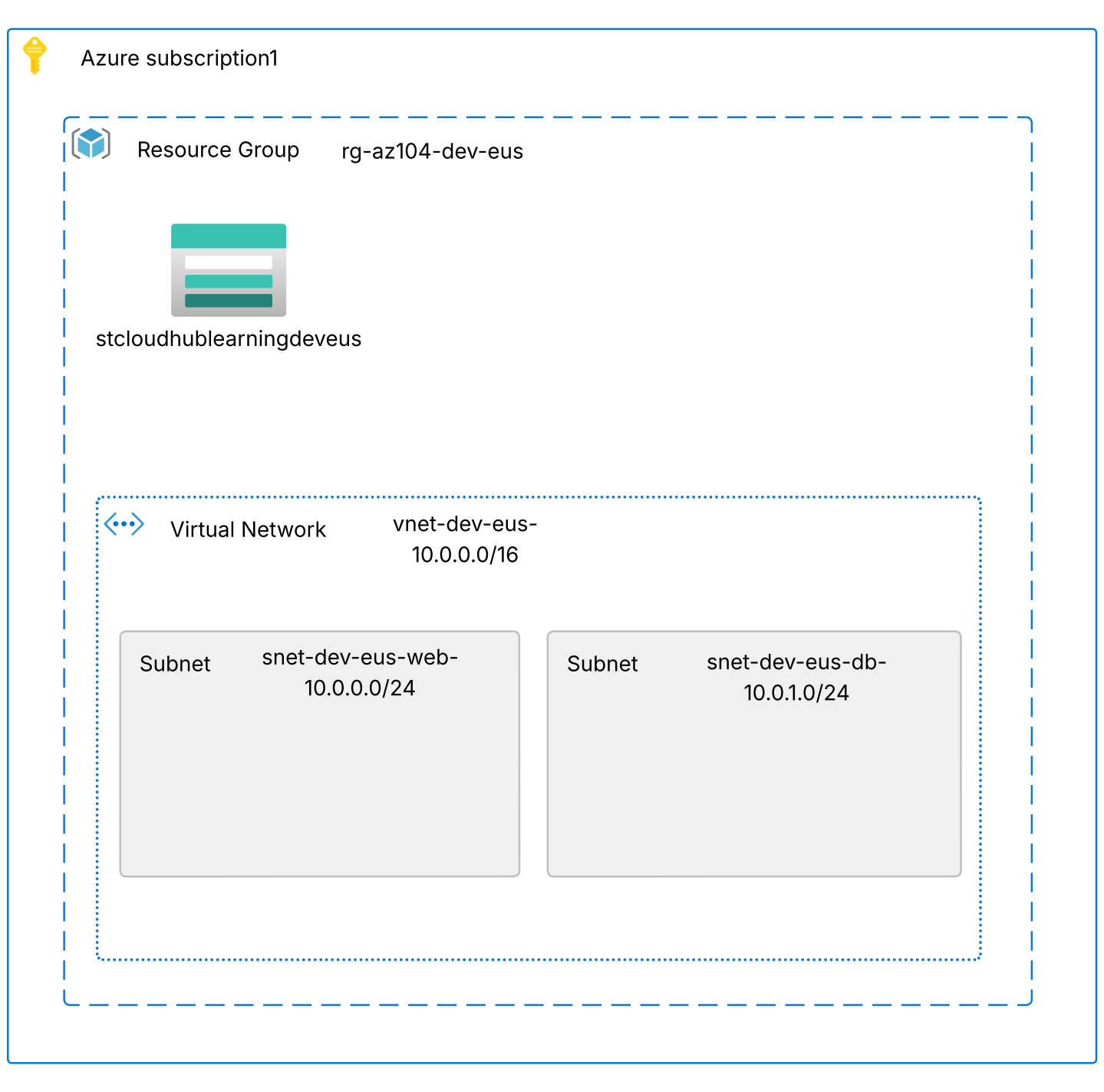


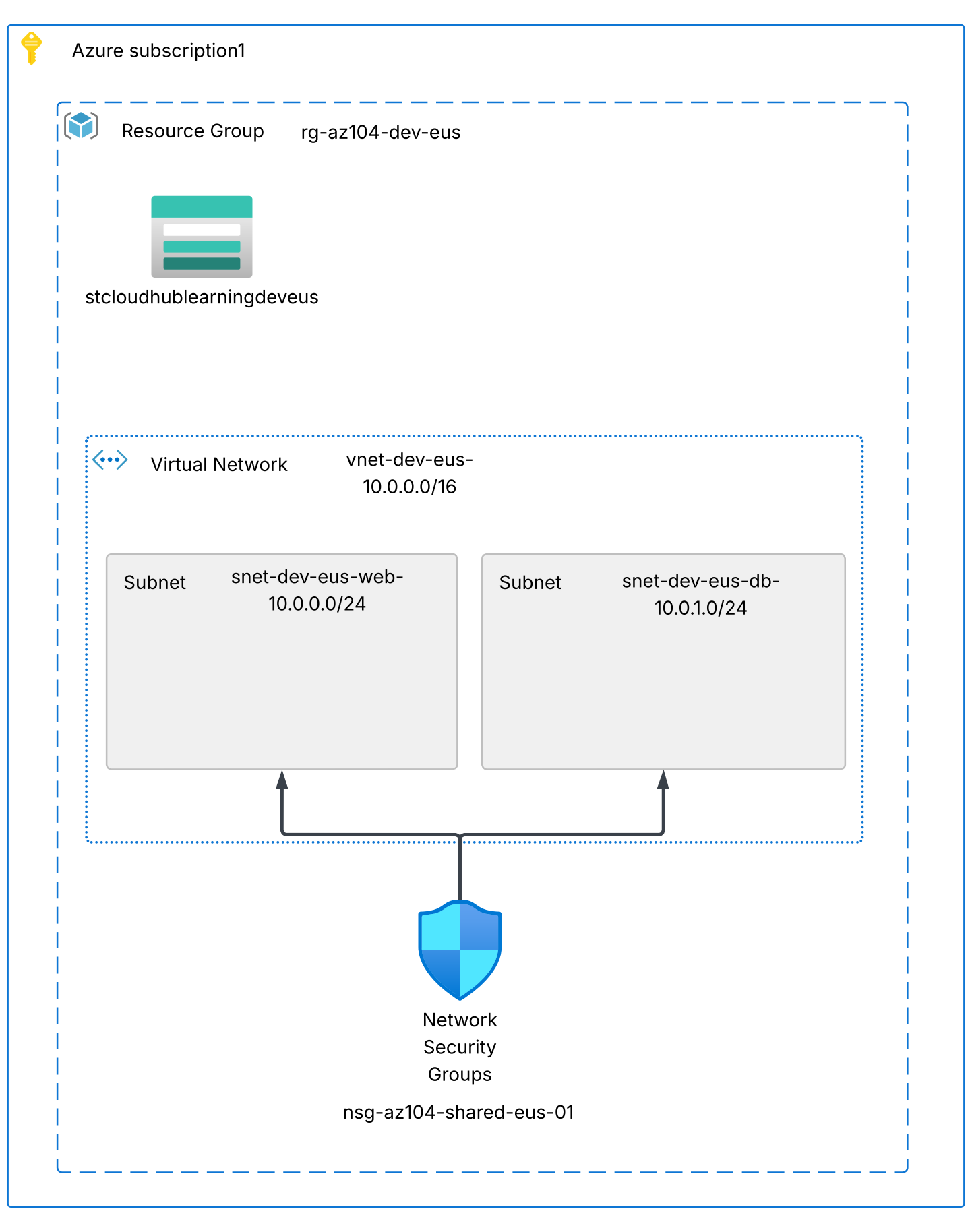
We are first going to build the virtual network.

The network will consist of a set of subnets.

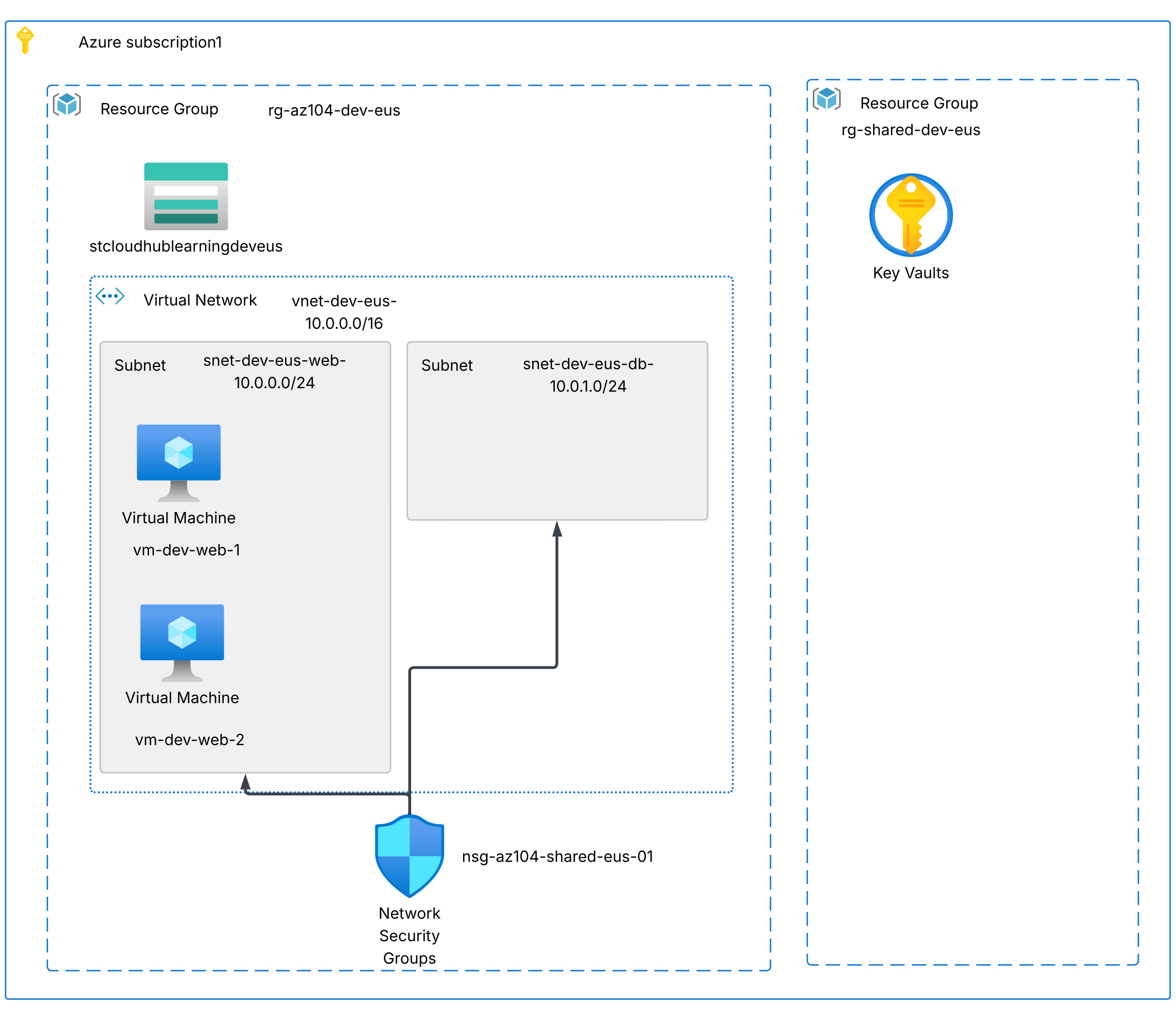
We will define a seperate module in bicep for creation of the virtual network.



The next step is to build an Azure storage account. Again we will define a seperate module for the storage account.



Then let's defined a network security group with some basic rules. Let's attach the NSG's to the subnets.

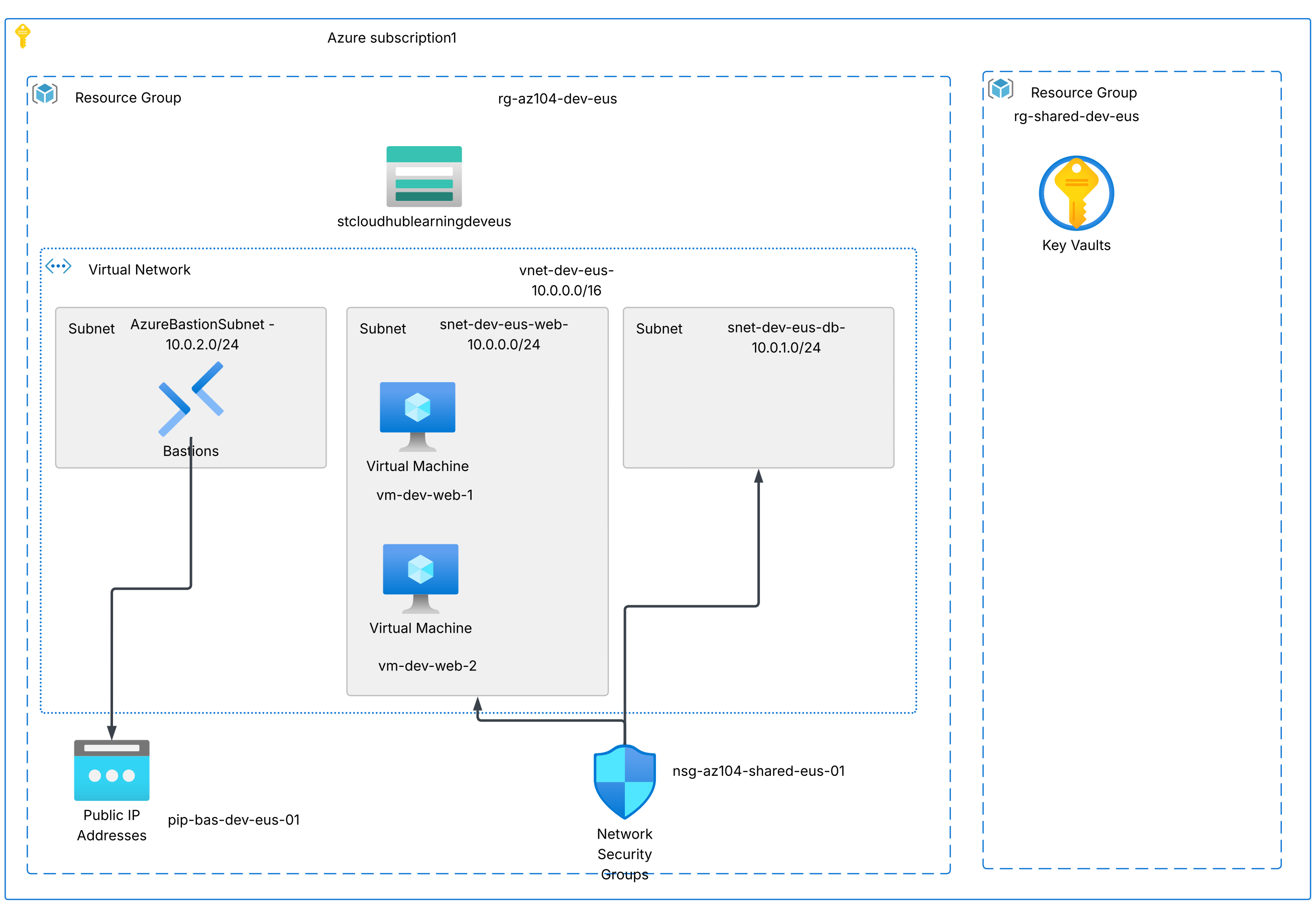


Now let's deploy Windows-based servers to snet-dev-eus-web subnet.

Let's deploy two servers to this subnet.

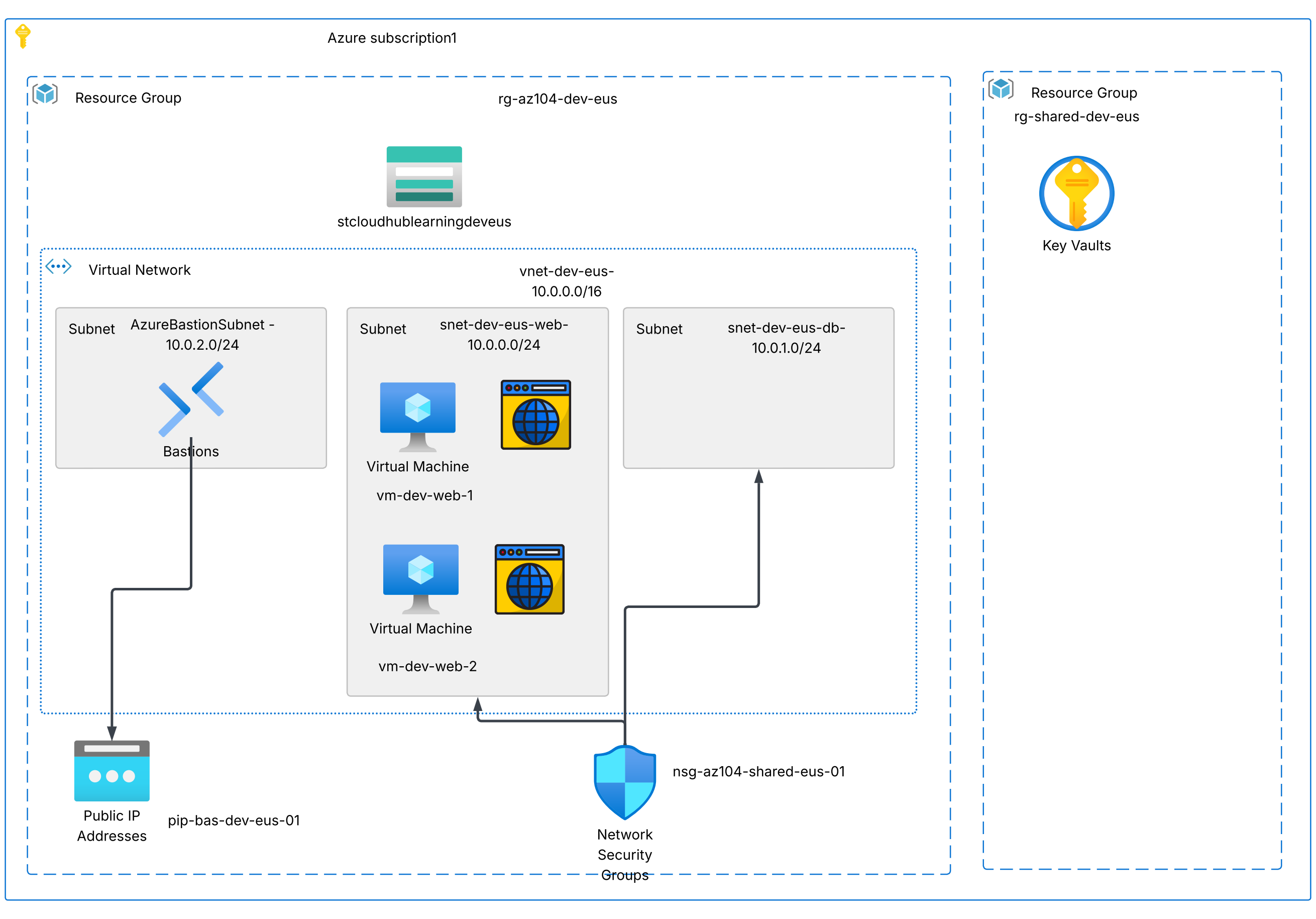
Each machine will be private, no public IP address assigned.

Let's make sure to pick up the administrator passwords for the virtual machines from an Azure Key vault.

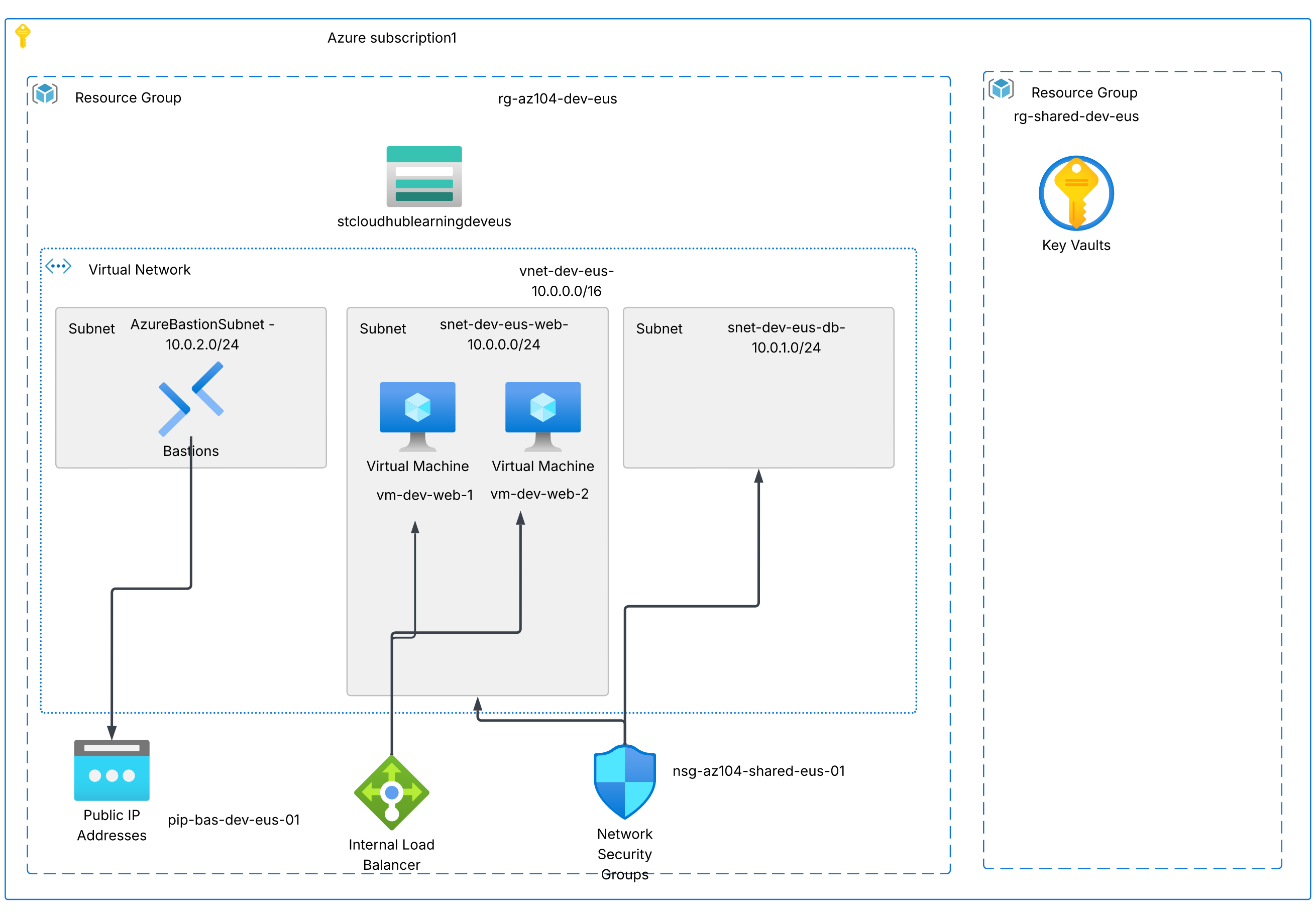


Now we need to deploy Azure Bastion. Let this be of the Standard SKU.

The Azure Bastion host needs to have a sepearte subnet and a Public IP address.

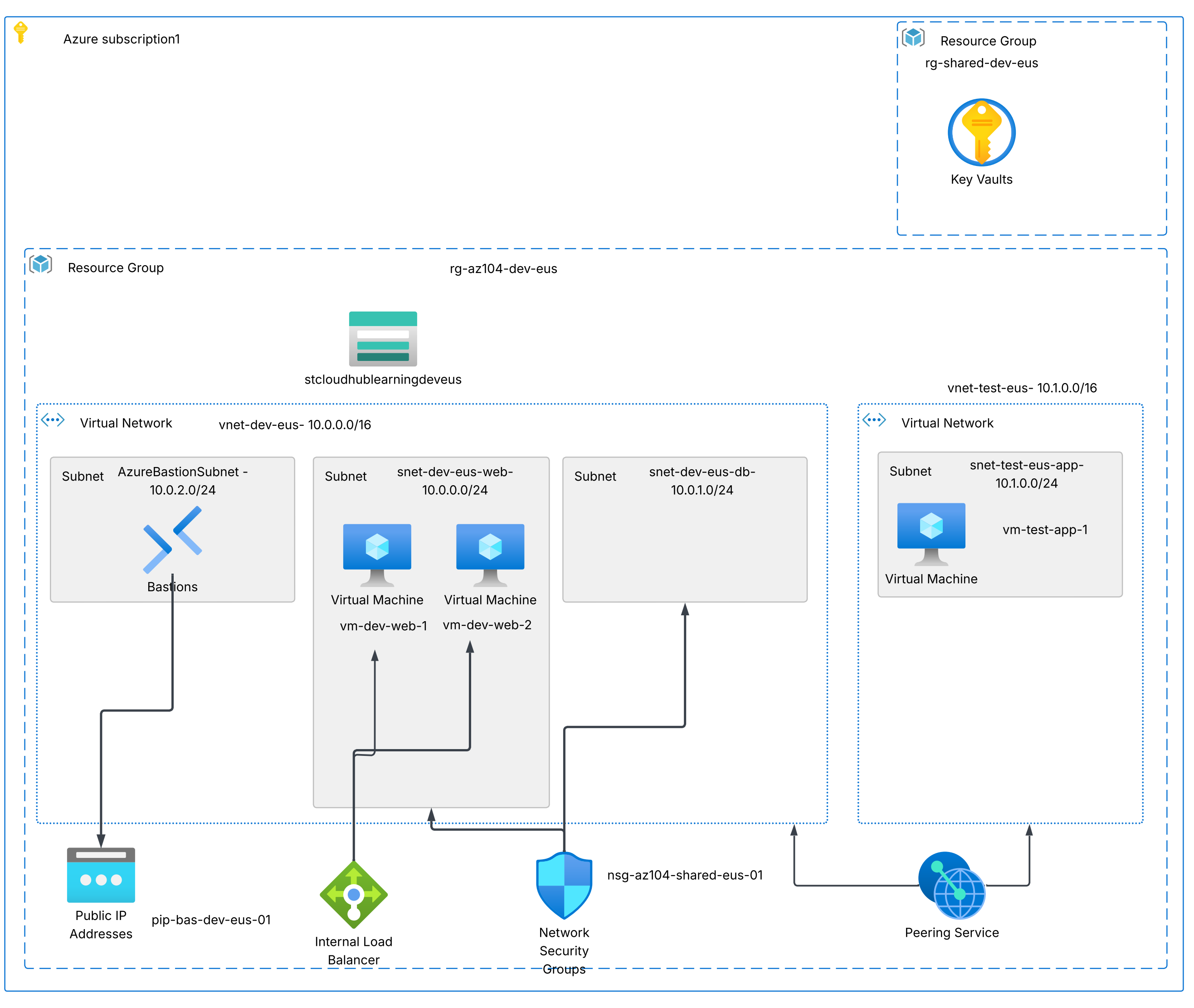


Now let's use bicep to setup Web servers on each machine via the use of Custom Script Extensions.



Now its time to wire up an Internal Load Balancer that will route requests across the web server. This time for the Load Balancer we need to configure the following

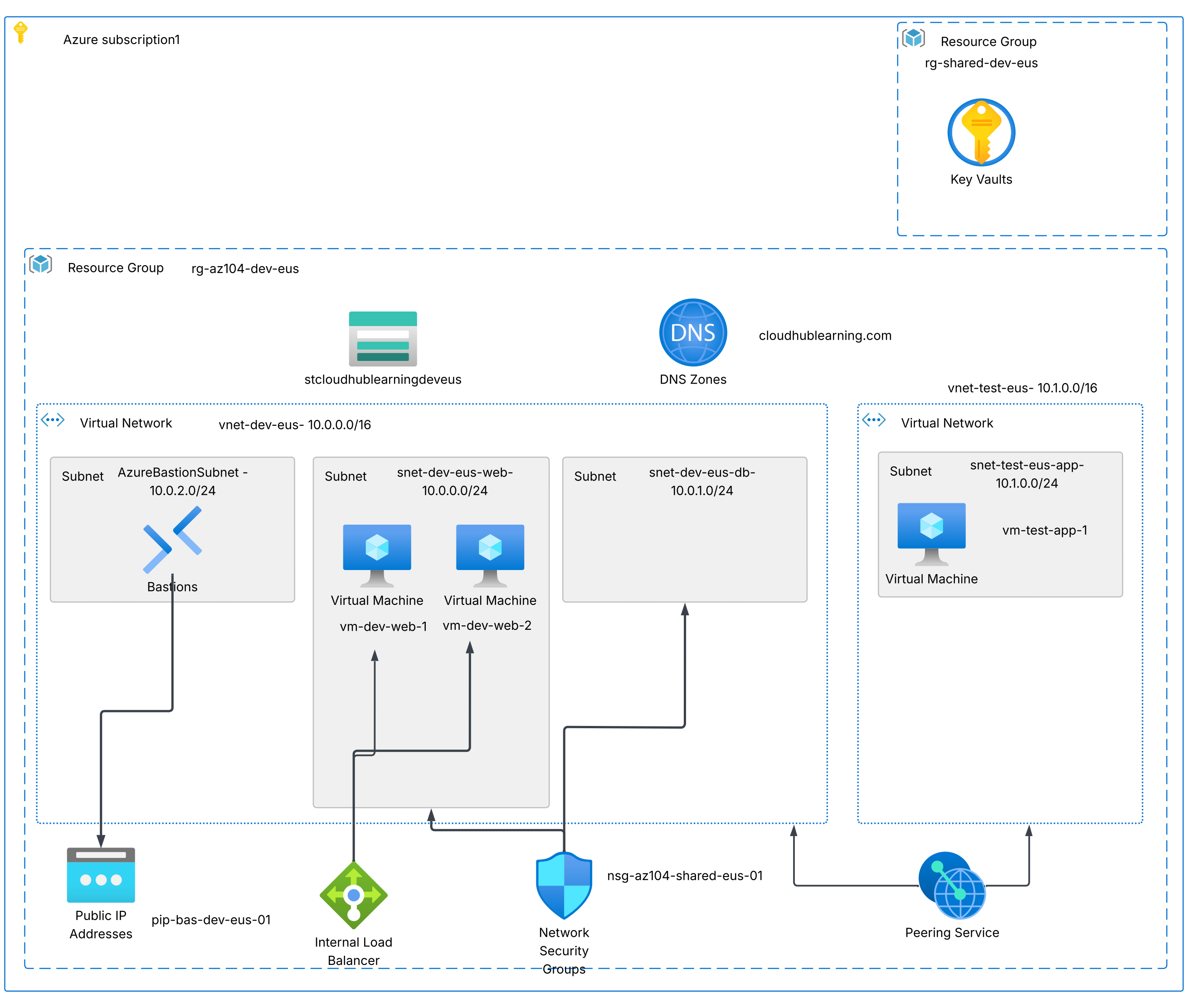
1. The backend pool of machines. Here we need to update the NIC's of the inidividual virtual machines to go to the backend.
2. A private frontend, with a private IP address from a subnet in the virtual network. We'll use the same subnet as the web server machines.
3. An HTTP health probe
4. Load Balancing rules



Let's build a new virtual machine in another virtual network.

This machine will be private, no Public IP address. It will be based on Ubuntu Server.

Then we can establish virtual network peering across the networks.



Now let's build a DNS Private zone.

Let's attach the virtual networks to the zone.

Azure Storage Service Endpoints

Virtual Network service endpoints provide secure and direct connectivity to Azure services over the Azure backbone network.
This ensures that your private IP addresses can reach public services without the need of requiring public IP addresses.