Diagram

Description automatically generated

**Create the *CoreServicesVnet* virtual network**

1. In Azure Cloud Shell, run the following command to create the **CoreServicesVnet** virtual network:

az network vnet create \

--resource-group [sandbox resource group name] \

--name CoreServicesVnet \

--address-prefixes 10.20.0.0/16 \

--location westus

1. Now, let's create the subnets that we need for the planned resources in the virtual network:

az network vnet subnet create \

--resource-group [sandbox resource group name] \

--vnet-name CoreServicesVnet \

--name GatewaySubnet \

--address-prefixes 10.20.0.0/27

az network vnet subnet create \

--resource-group [sandbox resource group name] \

--vnet-name CoreServicesVnet \

--name SharedServicesSubnet \

--address-prefixes 10.20.10.0/24

az network vnet subnet create \

--resource-group [sandbox resource group name] \

--vnet-name CoreServicesVnet \

--name DatabaseSubnet \

--address-prefixes 10.20.20.0/24

az network vnet subnet create \

--resource-group [sandbox resource group name] \

--vnet-name CoreServicesVnet \

--name PublicWebServiceSubnet \

--address-prefixes 10.20.30.0/24

1. Let's take a look at what we've created. Run this command to show all the subnets that we configured:

az network vnet subnet list \

--resource-group [sandbox resource group name] \

--vnet-name CoreServicesVnet \

--output table

You should see the following subnets listed:

AddressPrefix Name PrivateEndpointNetworkPolicies PrivateLinkServiceNetworkPolicies ProvisioningState ResourceGroup

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10.20.0.0/27 GatewaySubnet Enabled Enabled Succeeded [sandbox resource group name]

10.20.10.0/24 SharedServicesSubnet Enabled Enabled Succeeded [sandbox resource group name]

10.20.20.0/24 DatabaseSubnet Enabled Enabled Succeeded [sandbox resource group name]

10.20.30.0/24 PublicWebServiceSubnet Enabled Enabled Succeeded [sandbox resource group name]

## Create the ManufacturingVnet virtual network

1. In Cloud Shell, run the following command to create the **ManufacturingVnet** virtual network:

az network vnet create \

--resource-group [sandbox resource group name] \

--name ManufacturingVnet \

--address-prefixes 10.30.0.0/16 \

--location northeurope

1. Now, let's create the subnets that we need for the planned resources in the virtual network:

az network vnet subnet create \

--resource-group [sandbox resource group name] \

--vnet-name ManufacturingVnet \

--name ManufacturingSystemSubnet \

--address-prefixes 10.30.10.0/24

az network vnet subnet create \

--resource-group [sandbox resource group name] \

--vnet-name ManufacturingVnet \

--name SensorSubnet1 \

--address-prefixes 10.30.20.0/24

az network vnet subnet create \

--resource-group [sandbox resource group name] \

--vnet-name ManufacturingVnet \

--name SensorSubnet2 \

--address-prefixes 10.30.21.0/24

az network vnet subnet create \

--resource-group [sandbox resource group name] \

--vnet-name ManufacturingVnet \

--name SensorSubnet3 \

--address-prefixes 10.30.22.0/24

1. Let's take a look at what we've created. Run this command to show all the subnets that we configured:

az network vnet subnet list \

--resource-group [sandbox resource group name] \

--vnet-name ManufacturingVnet \

--output table

You should see the following subnets listed:

AddressPrefix Name PrivateEndpointNetworkPolicies PrivateLinkServiceNetworkPolicies ProvisioningState ResourceGroup

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10.30.10.0/24 ManufacturingSystemSubnet Enabled Enabled Succeeded [sandbox resource group name]

10.30.20.0/24 SensorSubnet1 Enabled Enabled Succeeded [sandbox resource group name]

10.30.21.0/24 SensorSubnet2 Enabled Enabled Succeeded [sandbox resource group name]

10.30.22.0/24 SensorSubnet3 Enabled Enabled Succeeded [sandbox resource group name]

## Create the ResearchVnet virtual network

1. In Cloud Shell, run the following command to create the **ResearchVnet** virtual network:

az network vnet create \

--resource-group [sandbox resource group name] \

--name ResearchVnet \

--address-prefixes 10.40.40.0/24 \

--location westindia

1. Now, let's create the subnets that we need for the planned resources in the virtual network:

az network vnet subnet create \

--resource-group [sandbox resource group name] \

--vnet-name ResearchVnet \

--name ResearchSystemSubnet \

--address-prefixes 10.40.40.0/24

1. Let's take a look at the final virtual network. Run this command to show all the subnets that we configured:

az network vnet subnet list \

--resource-group [sandbox resource group name] \

--vnet-name ResearchVnet \

--output table

You should see the following subnets listed:

AddressPrefix Name PrivateEndpointNetworkPolicies PrivateLinkServiceNetworkPolicies ProvisioningState ResourceGroup

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10.40.40.0/24 ResearchSystemSubnet Enabled Enabled Succeeded [sandbox resource group name]