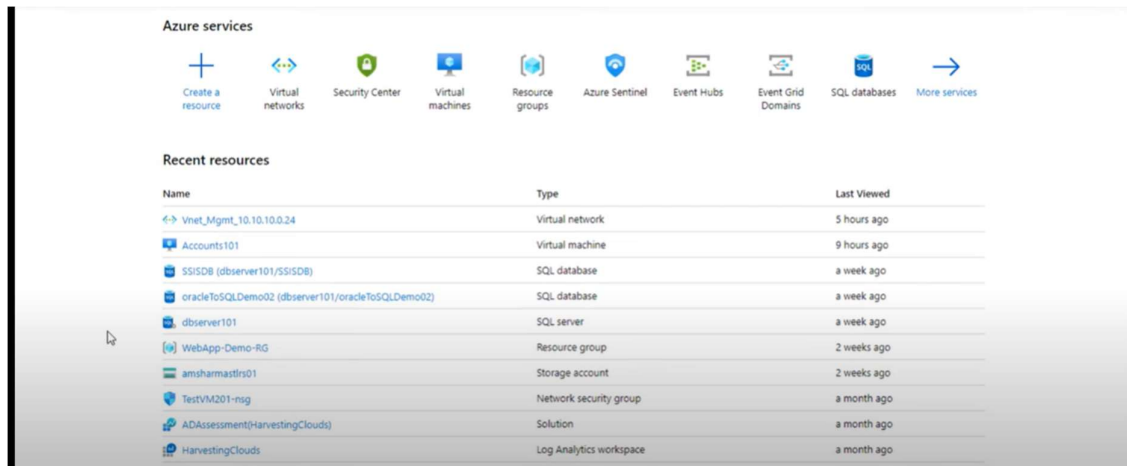


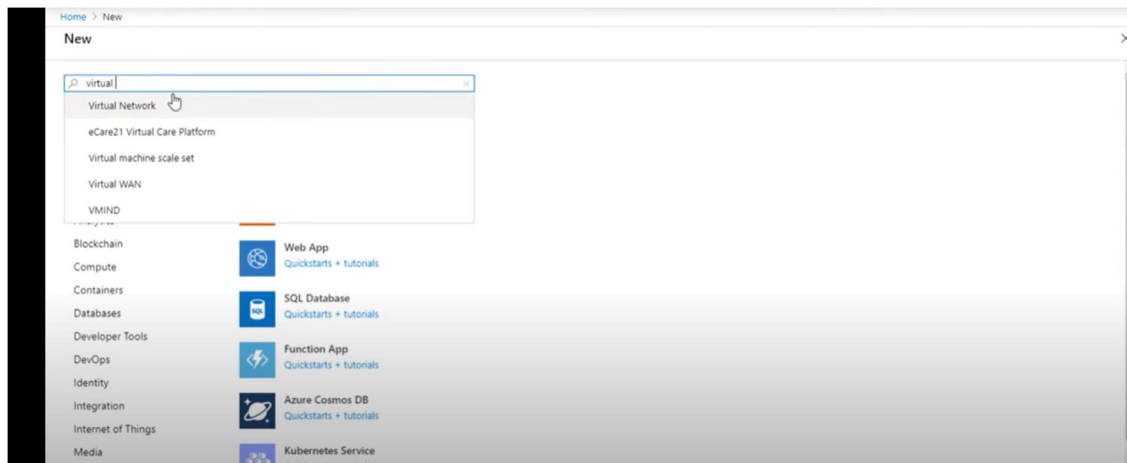
Minor Project Azure:

- a. Create a Vnet using Vnet Services (Assuming required Parameters) –

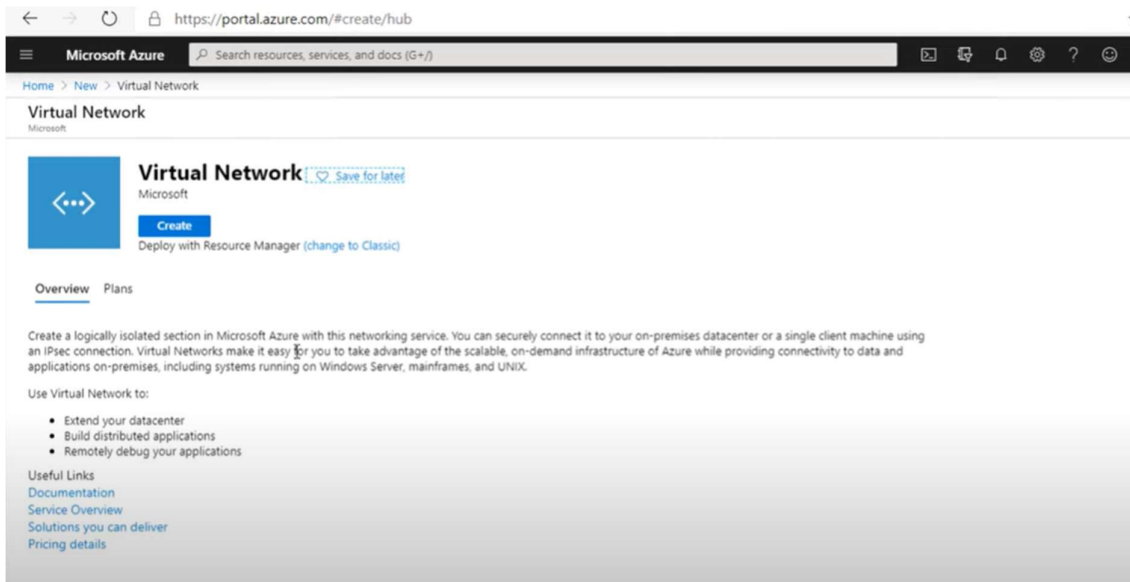
1. open azure account -



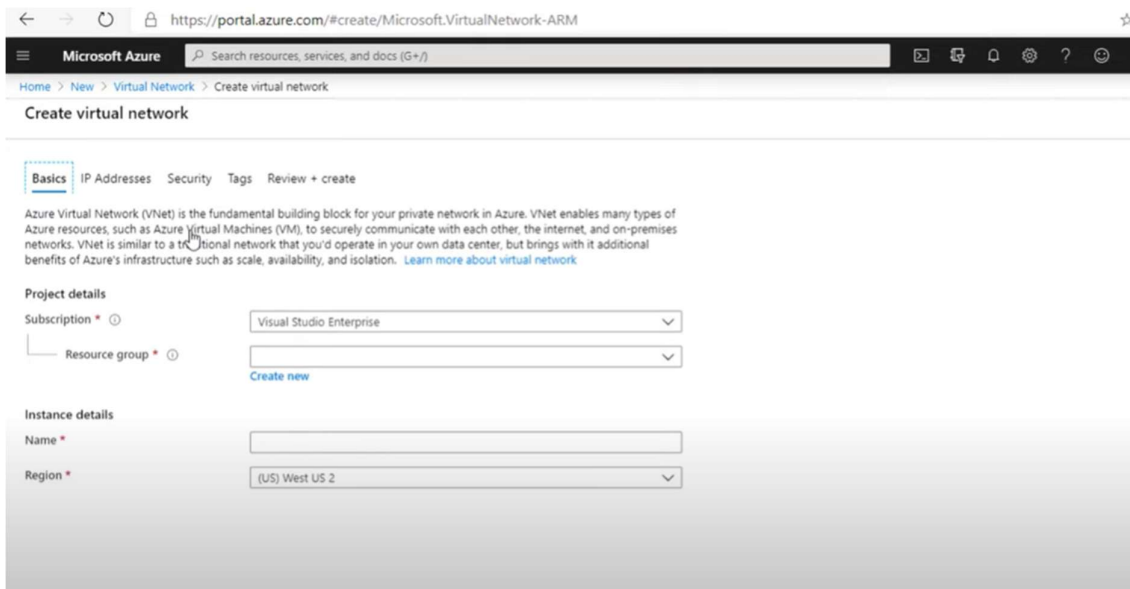
2. search for virtual network -



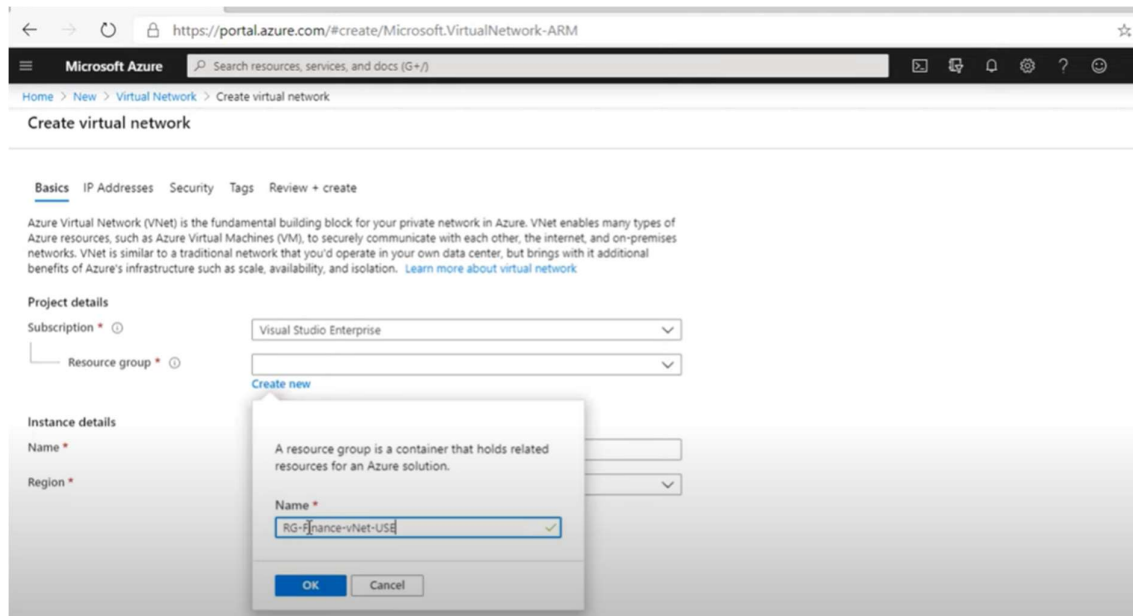
3. click create button -



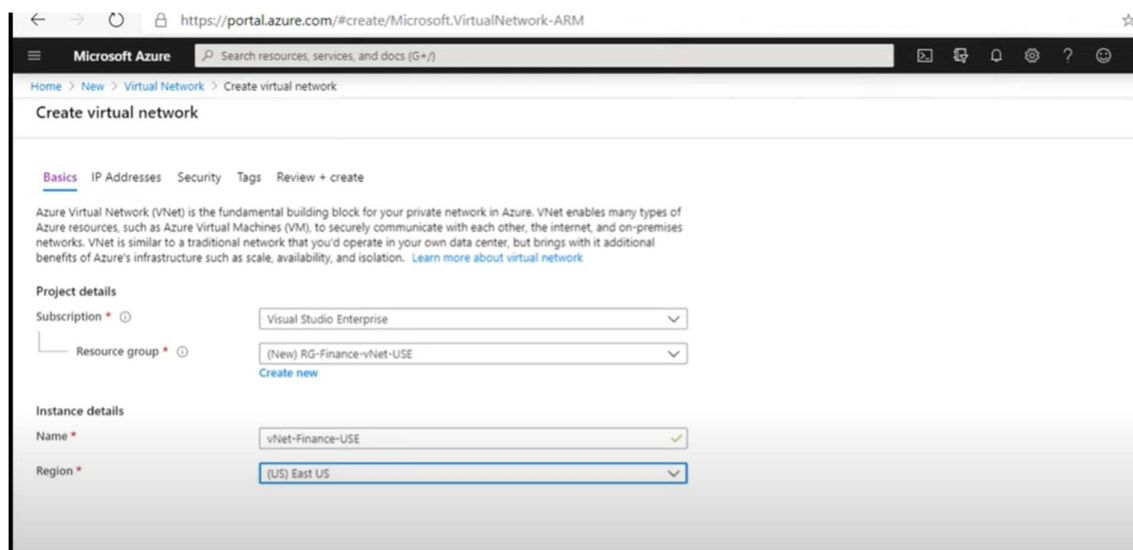
4. fill basic details with resource group -



5. choose region -



6. confirm the details -



7. choose the IP with CIDR -

← → ↻ 🔒 https://portal.azure.com/#create/Microsoft.VirtualNetwork-ARM

Microsoft Azure Search resources, services, and docs (G+)

Home > New > Virtual Network > Create virtual network

Create virtual network

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

10.0.0.0/22 ✓

⚠ The address space '10.0.0.0/22' overlaps with '10.0.0.0/16' in virtual network 'vNet-test101-USE'.

☐ 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

| Subnet name | Subnet address range |
|--|----------------------|
| This virtual network doesn't have any subnets. | |

Add subnet

Subnet name
backendSub

Subnet address
10.0.0.0/24
10.0.0.0 - 10.0.0.0 (addresses)

SERVICE ENDPOINTS

Create service endpoint policies to allow traffic to specific azure resources over service endpoints.

Services ⓘ
0 selected

8. Add subnet -

Home > New > Virtual Network > Create virtual network

Create virtual network

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

10.0.0.0/22 ✓

⚠ The address space '10.0.0.0/22' overlaps with '10.0.0.0/16' in virtual network 'vNet-test101-USE'.

☐ 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

| Subnet name | Subnet address range |
|---------------|----------------------|
| backendSubnet | 10.0.0.0/24 |

Add subnet

Subnet name *
businessSubnet ✓

Subnet address range * ⓘ
10.0.1.0/24 ✓
10.0.1.0 - 10.0.1.255 (251 + 5 Azure reserved addresses)

SERVICE ENDPOINTS

Create service endpoint policies to allow traffic to specific azure resources from your virtual network over service endpoints. [Learn more](#)

Services ⓘ
0 selected

9. another subnet -

Home > New > Virtual Network > Create virtual network

Create virtual network

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

10.0.0.0/22 ✓

⚠ The address space '10.0.0.0/22' overlaps with '10.0.0.0/16' in virtual network 'vNet-test101-USE'.

☐ 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

| Subnet name | Subnet address range |
|----------------|----------------------|
| backendSubnet | 10.0.0.0/24 |
| businessSubnet | 10.0.1.0/24 |

Add subnet

Subnet name *
frontEndSubnet ✓

Subnet address range * ⓘ
10.0.2.0/24 ✓
10.0.2.0 - 10.0.2.255 (251 + 5 Azure reserved addresses)

SERVICE ENDPOINTS

Create service endpoint policies to allow traffic to specific azure resources from your virtual network over service endpoints. [Learn more](#)

Services ⓘ
0 selected

10. choose security options -

The screenshot shows the 'Create virtual network' page in the Azure portal, specifically the 'Security' tab. The page has a breadcrumb trail: Home > New > Virtual Network > Create virtual network. The 'Security' tab is selected, showing options for 'DDoS protection' (Basic, Standard) and 'Firewall' (Disabled, Enabled). The 'Basic' and 'Disabled' options are selected.

Microsoft Azure

Search resources, services, and docs (G+)

Home > New > Virtual Network > Create virtual network

Create virtual network

Basics IP Addresses Security Tags Review + create

DDoS protection ⓘ Basic Standard

Firewall ⓘ Disabled Enabled

11. give tags or heading to the network -

The screenshot shows the 'Create virtual network' page in the Azure portal, specifically the 'Tags' tab. The page has a breadcrumb trail: Home > New > Virtual Network > Create virtual network. The 'Tags' tab is selected, showing a description of tags and a table for adding them. The table has two columns: 'Name' and 'Value'. The first row has 'Department' in the 'Name' column and 'Finance' in the 'Value' column. There is a plus icon and a dropdown arrow next to the 'Value' field.

Microsoft Azure

Search resources, services, and docs (G+)

Home > New > Virtual Network > Create virtual network

Create virtual network

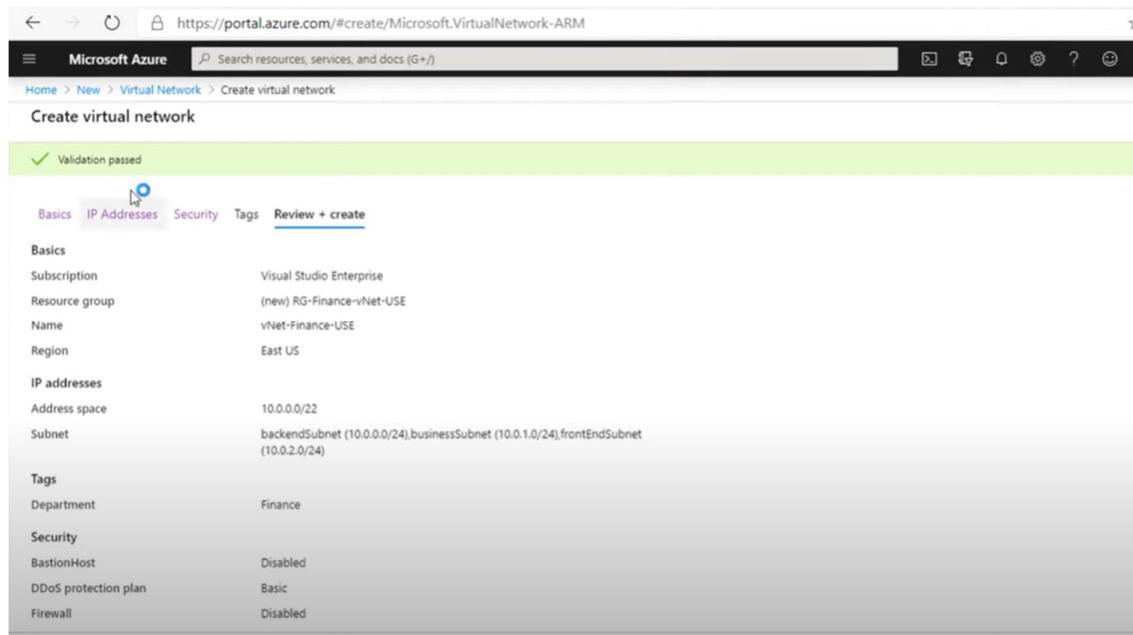
Basics IP Addresses Security Tags Review + create

Tags are name/value pairs that enable you to categorize resources and view consolidated billing by applying the same tag to multiple resources and resource groups. [Learn more about tags](#) ⓘ

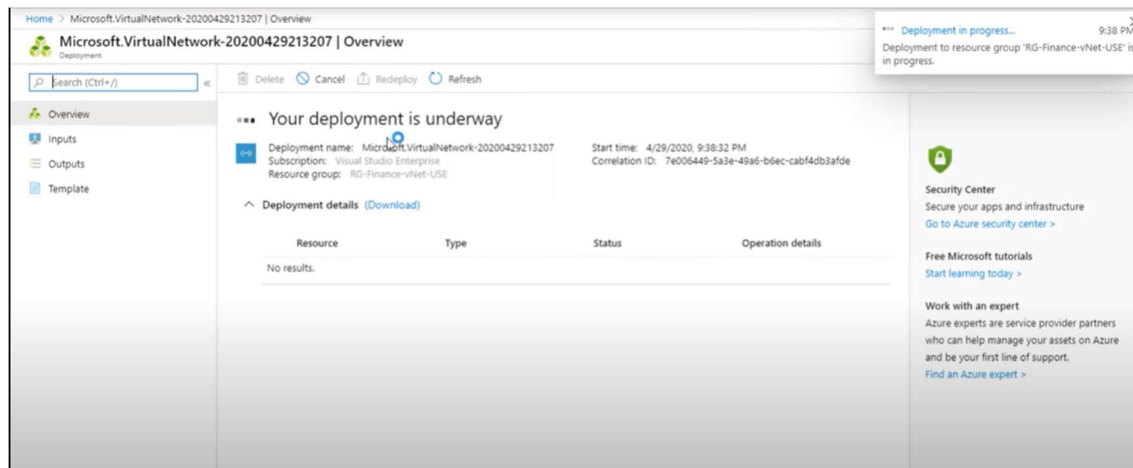
Note that if you create tags and then change resource settings on other tabs, your tags will be automatically updated.

| Name ⓘ | Value ⓘ |
|------------|---------|
| Department | Finance |
| | |

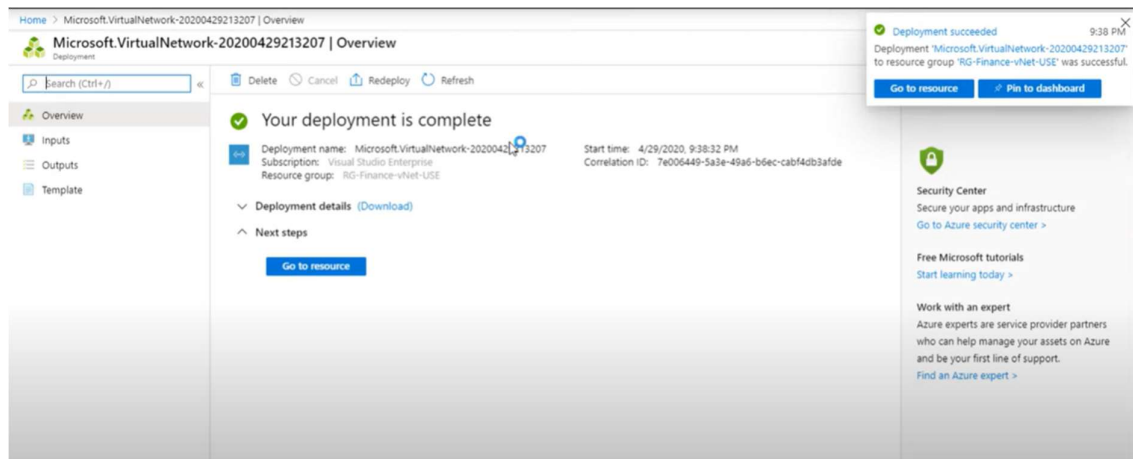
12. validate and check the details -



13. deployment taking place -



14. deployment complete -



15. check the details of created network -

The screenshot shows the 'Overview' page for the virtual network 'vNet-Finance-USE'. The left sidebar contains navigation links for Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Settings, Address space, Connected devices, Subnets, DDoS protection, Firewall, Security, DNS servers, and Peerings. The main content area displays the following information:

- Resource group (change): RG-Finance-vNet-USE
- Location: East US
- Subscription (change): Visual Studio Enterprise
- Subscription ID: d407fb02-4bc4-439a-81b1-1af92b0bb049
- Tags (change): Department: Finance
- Address space: 10.0.0.0/22
- DNS servers: Azure provided DNS service

Below this information is a section for 'Connected devices' with a search bar and a table with columns: Device, Type, IP Address, and Subnet. The table currently shows 'No results'.

16. new subnets can also be added, if needed -

The screenshot shows the 'Address space' page for the virtual network 'vNet-Finance-USE'. The left sidebar is the same as in the previous screenshot. The main content area displays the current address space '10.0.0.0/22' and a table for 'Add additional address range' with columns: Name, Address range, and ... (three dots). A warning message is displayed: 'The address space '10.0.0.0/22' overlaps with '10.0.0.0/16' in virtual network 'vNet-test101-USE'.'

17. see all the subnet details-

The screenshot shows the 'Subnets' page for the virtual network 'vNet-Finance-USE'. The left sidebar is the same as in the previous screenshots. The main content area displays a table of subnets with columns: Name, Address range, IPv4 available addresses, Delegated to, Security group, and ... (three dots). The table contains the following data:

| Name | Address range | IPv4 available addresses | Delegated to | Security group | ... |
|----------------|---------------|--------------------------|--------------|----------------|-----|
| backendSubnet | 10.0.0.0/24 | 251 | - | - | ... |
| businessSubnet | 10.0.1.0/24 | 251 | - | - | ... |
| frontEndSubnet | 10.0.2.0/24 | 251 | - | - | ... |

18. each subnet detailed options can also checked -

The screenshot displays the configuration page for a subnet named 'backendSubnet' within the 'vNet-Finance-USE' virtual network. The breadcrumb navigation at the top indicates the path: Home > Microsoft.VirtualNetwork-20200429213207 | Overview > vNet-Finance-USE | Subnets > backendSubnet. The page title is 'backendSubnet' with a close button. Action buttons for 'Save', 'Discard', 'Delete', and 'Refresh' are located below the title. The configuration section includes: 'Address range (CIDR block)' with a text input showing '10.0.0.0/24' and a tooltip indicating '10.0.0.0 - 10.0.0.255 (256 addresses)'; 'Available addresses' with a tooltip showing '253' and a selection icon; 'NAT gateway' with a dropdown menu set to 'None'; an unchecked checkbox for 'Add IPv6 address space'; 'Network security group' with a dropdown menu set to 'None'; 'Route table' with a dropdown menu set to 'None'; and expandable sections for 'Users' (with a 'Manage users' link) and 'Service endpoints'. A scrollbar is visible on the right side of the configuration area.

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SRM, KTR