

TASK 1: Create CoreServicesVnet (Portal)

The screenshot shows the Microsoft Azure portal interface for creating a virtual network. The top navigation bar includes 'Microsoft Azure', 'Search resources, services, and docs (Q+)', 'Copilot', and user information ('kumar220014@gmail.com' and 'DEFAULT DIRECTORY (05SE2200...)').

The main page title is 'Create virtual network'. A green banner at the top indicates 'Validation passed'. Below it, tabs include 'Basics', 'Security', 'IP addresses', 'Tags', and 'Review + create' (which is underlined).

Basics section details:

Subscription	Azure subscription 1
Resource Group	az104-rg4
Name	CoreServicesVnet
Region	West US 2

Security section details:

Azure Bastion	Disabled
Azure Firewall	Disabled
Azure DDoS Network Protection	Disabled

IP addresses section details:

Address space	10.20.0.0/16 (65,536 addresses)
Subnet	default (10.20.0.0/24) (256 addresses)
Subnet	SharedServicesSubnet (10.20.10.0/24) (256 addresses)
Subnet	DatabaseSubnet (10.20.20.0/24) (256 addresses)

Tags section is empty.

At the bottom, there are 'Previous', 'Next', and a blue 'Create' button. To the right of the 'Create' button is a link 'Download a template for automation' and a 'Give feedback' link.

Your deployment is complete

Deployment summary:

Deployment name	: CoreServicesVnet-1765285828877
Subscription	: Azure subscription 1
Resource group	: az104-rg4

Deployment details:

Start time	: 12/9/2025, 6:10:39 PM
Correlation ID	: 68136fbc-0476-4755-b19b-9623319a2708

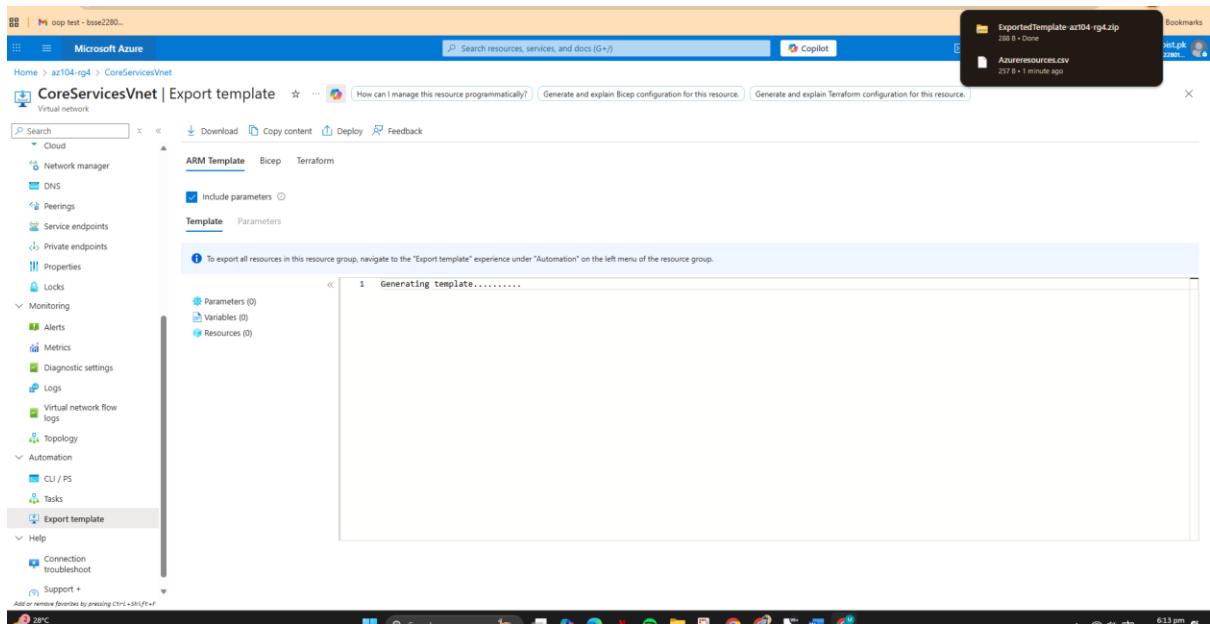
Next steps:

- > Deployment details
- < Next steps

[Go to resource](#)

Feedback options:

- Give feedback
- Tell us about your experience with deployment



TASK 2: Create ManufacturingVnet Using Template

```

Template.json
{
  "$schema": "https://schema.management.azure.com/schemas/2019-04-01/deploymentTemplate.json#",
  "contentVersion": "1.0.0.0",
  "parameters": {
    "virtualNetworks_CoreServicesVnet_name": {
      "defaultValue": "ManufacturingVnet",
      "type": "String"
    }
  },
  "variables": {},
  "resources": [
    {
      "type": "Microsoft.Network/virtualNetworks",
      "apiVersion": "2024-07-01",
      "name": "[parameters('virtualNetworks_CoreServicesVnet_name')]",
      "location": "West US",
      "properties": {
        "addressSpace": {
          "addressPrefixes": [
            "10.30.0.0/16"
          ]
        },
        "encryption": {
          "enabled": false,
          "enforcement": "AllowUnencrypted"
        },
        "privateEndpointVNetPolicies": "Disabled",
        "subnets": [
          {
            "name": "default",
            "id": "[resourceId('Microsoft.Network/virtualNetworks/subnets', parameters('virtualNetworks_CoreServicesVnet_name'), 'default')]",
            "properties": {
              "addressPrefixes": [
                ...
              ]
            }
          }
        ]
      }
    }
  ]
}
  
```

Output:

18:17:00 - Unable to download template function definitions in order to verify proper usage in Resource Manager deployment templates. Please make sure you are connected to the Internet and then try reloading the file. There was an error deserializing the object or type.

TASK 3: ASG + NSG Configuration

The screenshot shows the Microsoft Azure Deployment blade for a completed deployment. The deployment name is 'CreateApplicationSecurityGroupBladeViewModel'. The deployment details include:

- Subscription: Azure subscription 1
- Resource group: az104-vrg4
- Start time: 12/9/2025, 6:24:09 PM
- Correlation ID: f3fda8cb-bd6d-4528-b067-fb2fa3be528f

The blade also includes sections for Deployment details, Next steps, and Go to resource. A sidebar on the right provides links to Cost management, Microsoft Defender for Cloud, Free Microsoft tutorials, and Work with an expert.

Microsoft Azure

Home > myNSGSecure

myNSGSecure | Subnets

Network security group

Search Associate

Overview Activity log Access control (IAM) Tags Diagnose and solve problems Resource visualizer Settings Inbound security rules Outbound security rules Network interfaces Subnets Properties Locks Monitoring Automation Help

Name Address range Virtual network

SharedServicesSubnet	10.25.10.0/24	CoreServicesVNet
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Give feedback

Microsoft Azure

Home > myNSGSecure

myNSGSecure | Inbound security rules

Network security group

Search Add Hide default rules Refresh Delete Give feedback

Overview Activity log Access control (IAM) Tags Diagnose and solve problems Resource visualizer Settings Inbound security rules Outbound security rules Network interfaces Subnets Properties Locks Monitoring Automation Help

Priority Name Port Protocol Source Destination Action

65000	AllowVNetInbound	Amy	Amy	VirtualNetwork	Allow
65001	AllowAzureLoadBalancerInbound	Amy	Amy	AzureLoadBalancer	Allow
65500	DenyAllInbound	Amy	Amy	Amy	Deny

Add inbound security rule

source port ranges *

Destination Any Custom Service Custom

Destination port ranges * 80,443

Protocol Any TCP UDP ICMPv4 ICMPv6

Action Allow Deny

Priority * 100

Name * AllowASG

Description

Add Cancel Give feedback

The screenshot displays two main Azure interface pages:

- Outbound security rules (Left Panel):**
 - Shows three existing rules: AllowVNetOutBound, AllowInternetOutBound, and DenyAllOutBound.
 - Includes a search bar, filter by name, and sorting options for Priority, Name, Port, Protocol, Source, Destination, and Action.
 - A message states: "Network security group security rules are evaluated by priority using the combination of source, source port, destination, destination port, and protocol to allow or deny the traffic. A set of security rules, but you can override them with rules that have a higher priority." It also links to "Learn more".
- Add outbound security rule (Right Panel):**
 - Form fields include: Source (Any), Source port ranges (*), Destination (Service Tag: Internet), Destination service tag (Internet), Service (Custom), Destination port ranges (8080), Protocol (Any), Action (Deny), Priority (4096), and Name (4096).
 - Buttons: Add, Cancel, Give feedback.
- Deployment Overview (Bottom):**
 - Shows a completed deployment named "CreateNetworkSecurityGroupBladeV2-20251209182632".
 - Details: Deployment name: CreateNetworkSecurityGroupBladeV2-20251209182632, Subscription: Azure subscription 1, Resource group: az104-rg4.
 - Information: Start time: 12/9/2025, 6:27:10 PM, Correlation ID: 8387312f-3cd7-4814-a34b-5286911749f2.
 - Links: Go to resource, Give feedback, Tell us about your experience with deployment.
 - Side panel features:
 - Cost management:** Get notified to stay within your budget to prevent unexpected charges on your bill. Set up cost alerts >
 - Microsoft Defender for Cloud:** Secure your apps and infrastructure. Go to Microsoft Defender for Cloud >
 - Free Microsoft tutorials:** Start learning today >
 - Work with an expert:** Azure experts are service provider partners.

TASK 4: Public & Private DNS

Microsoft Azure

Home > DNS zones >

Create a DNS Zone

Running final validation...

Basics DNS Zone Editor Tags Review + Create

View automation template

Basics

Subscription	Azure subscription 1
Resource group	az104-rg4
Resource group location	West US 2
Name	MUB.com

DNS Zone Record Set(s)

Number of record sets 0 record set(s)

Microsoft Azure

Home > MUB.com_1765287180632 | Overview > MUB.com

MUB.com | Recordsets

DNS zone

+ Add ⌂ Refresh ⌂ Delete ⌂ Give feedback

Search

Overview Activity log Tags Diagnose and solve problems Resource visualizer Settings DNS Management Records DNSSEC Monitoring Automation Help

Fetched 2 record set(s).

Name	Type	TTL	Value
www	NS	172800	ns1-07.azure-dns.com. ns2-07.azure-dns.net. ns3-07.azure-dns.org. ns4-07.azure-dns.info.
www	SOA	3600	Email: azuredns-hostmaster.microsoft.com Host: ns1-07.azure-dns.com. Refresh: 3600 Retry: 300 Expire: 2419200 Minimum TTL: 300 Serial number: 1

Add Cancel ⌂ Give feedback

```
C:\Users\PC>nslookup www.MUB.com
Server: UnKnown
Address: fe80::1

Non-authoritative answer:
Name: www.MUB.com
Addresses: 13.248.169.48
          76.223.54.146

C:\Users\PC>
```

Microsoft Azure

Home > Private DNS zones >

Create Private DNS Zone

Running final validation...

Basics Private DNS Zone Editor Virtual Network Links Tags Review + Create

View automation template

Basics

Subscription	Azure subscription 1
Resource group	az104-rg4
Resource group location	West US 2
Name	private.MUB.com

DNS Zone Record Set(s)

Number of record sets	0 record set(s)
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Virtual network link(s)

Numer of Virtual Network Links	0 virtual network link(s)
--------------------------------	---------------------------

Microsoft Azure

private.MUB.com_1765287366875 | Overview

Deployment

Overview

Inputs Outputs Template

Your deployment is complete

Deployment name : private.MUB.com_1765287366875
Subscription : Azure subscription 1
Resource group : az104-rg4

Start time : 12/9/2025, 6:36:18 PM
Correlation ID : f5c727bc-d609-41e1-be72-44c17e8ac5ed

Deployment details

Next steps

Go to resource

Cost management
Get notified to stay within your budget and prevent unexpected charges on your bill.
Set up cost alerts >

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