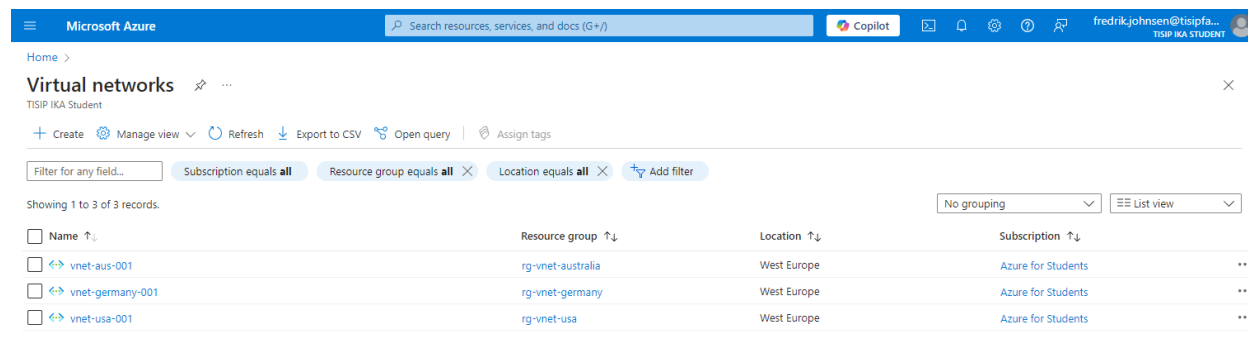


# Øving 4

For Fredrik Johnsen

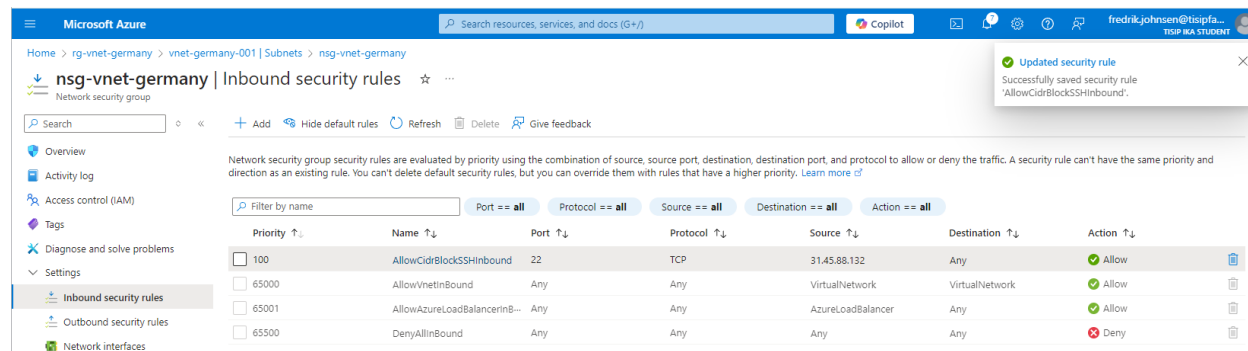
Først opprettet jeg tre virtuelle nettverk, hver med sin egen ressursgruppe, og tildelte dem adresserommet 10.0.0.0/16.



The screenshot shows the 'Virtual networks' page in the Azure portal. It lists three virtual networks: vnet-aus-001, vnet-germany-001, and vnet-usa-001. Each is associated with a resource group (rg-vnet-\*, West Europe) and the Azure for Students subscription.

Name	Resource group	Location	Subscription
vnet-aus-001	rg-vnet-australia	West Europe	Azure for Students
vnet-germany-001	rg-vnet-germany	West Europe	Azure for Students
vnet-usa-001	rg-vnet-usa	West Europe	Azure for Students

Deretter opprettet jeg en nettverkssikkerhetsgruppe for Tyskland og la inn en regel som tillater SSH-tilgang kun fra min IP-adresse.



The screenshot shows the 'Inbound security rules' page for the 'nsg-vnet-germany' network security group. It displays a list of rules, including a custom rule 'AllowCidrBlockSSHInbound' with priority 100, and default rules for VNet, Azure Load Balancer, and DenyAll.

Priority	Name	Port	Protocol	Source	Destination	Action
100	AllowCidrBlockSSHInbound	22	TCP	31.45.88.132	Any	Allow
65000	AllowVnetInBound	Any	Any	VirtualNetwork	VirtualNetwork	Allow
65001	AllowAzureLoadBalancerInBound	Any	Any	AzureLoadBalancer	Any	Allow
65500	DenyAllInBound	Any	Any	Any	Any	Deny

For hvert virtuelle nettverk opprettet jeg tre subnett med adresserommet 10.0.0.0/24 og knyttet dem til sikkerhetsgruppen.

Microsoft Azure

Home > rg-vnet-germany > vnet-germany-001

vnet-germany-001 | Subnets

Search

+ Subnet + Gateway subnet Refresh Manage users Delete

Search subnets

Name	IPv4	IPv6	Available IPs	Delegated to	Security group	Route table
production	10.0.0.0/24	-	251	-	nsg-vnet-germany	-
development	10.0.1.0/24	-	251	-	nsg-vnet-germany	-
test	10.0.2.0/24	-	251	-	nsg-vnet-germany	-

Successfully added subnet  
Successfully added subnet 'test' to virtual network 'vnet-germany-001'.

Jeg opprettet en Ubuntu-maskin i Germany Development.

Microsoft Azure

Home > CreateVm-canonical.ubuntu-24\_04-lts-server-20241020193250 | Overview

Overview

Your deployment is complete

Deployment name: CreateVm-canonical.ubuntu-24\_04-lts-server-2... Start time: 10/20/2024, 7:36:33 PM  
Subscription: Azure for Students Correlation ID: 7b5d61e1-dcf1-42d7-8b0d-463de0b874ce

Deployment details

Next steps

Setup auto-shutdown Recommended  
Monitor VM health, performance and network dependencies Recommended  
Run a script inside the virtual machine Recommended

Go to resource Create another VM

Give feedback  
Tell us about your experience with deployment

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

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Microsoft Azure

Home > CreateVm-canonical.ubuntu-24\_04-lts-server-20241020193250 | Overview

vm-germany-001

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Connect

Networking

Settings

Availability + scale

Security

Backup + disaster recovery

Operations

Monitoring

Automation

Help

Essentials

Resource group (move) : rg-vnet-germany

Status : Running

Location : West Europe (Zone 3)

Subscription (move) : Azure for Students

Subscription ID : b9350ae8-22fe-4d2b-aff9-f76480a78621

Availability zone : 3

Tags (edit) : Add tags

Operating system : Linux (ubuntu 24.04)

Size : Standard D51 v2 (1 vcpu, 3.5 GiB memory)

Public IP address : 48.209.80.199

Virtual network/subnet : vnet-germany-001/development

DNS name : Not configured

Health state : -

Time created : 10/20/2024, 5:36 PM UTC

Properties

Virtual machine

Computer name : vm-germany-001

Operating system : Linux (ubuntu 24.04)

VM generation : V2

VM architecture : x64

Agent status : Ready

Agent version : 2.11.1.12

Hibernation : Disabled

Networking

Public IP address : 48.209.80.199 (Network interface vm-germany-001929\_x3)

Public IP address (IPv6) : -

Private IP address : 10.0.1.4

Private IP address (IPv6) : -

Virtual network/subnet : vnet-germany-001/development

DNS name : Configure

Jeg koblet meg til denne ved hjelp av Putty.

Search resources, services, and docs (G+)

fredrikjohnsen@tispfa...  
TISP IKA STUDENT

server-20241020193250 | Overview

Connect Start Restart Stop Hibernate Capture Delete Refresh Open in mobile Feedback CLI / PS

Essentials

Resource group: fredrik@vm-germany-001: ~

Status: login as: fredrik  
fredrik@48.209.80.199's password:  
Welcome to Ubuntu 24.04.1 LTS (GNU/Linux 6.8.0-1016-azure x86\_64)

Location: System information as of Sun Oct 20 17:39:18 UTC 2024

Subscription: \* Documentation: <https://help.ubuntu.com>  
\* Management: <https://landscape.canonical.com>  
\* Support: <https://ubuntu.com/pro>

Availability: System load: 0.16 Processes: 124  
Usage of /: 5.0% of 28.02GB Users logged in: 0  
Memory usage: 8% IPv4 address for eth0: 10.0.1.4  
Swap usage: 0%

Tags (edit)

Properties: Expanded Security Maintenance for Applications is not enabled.  
0 updates can be applied immediately.

Virtu: Enable ESM Apps to receive additional future security updates.  
See <https://ubuntu.com/esm> or run: `sudo pro status`

Operating system: The programs included with the Ubuntu system are free software;  
the exact distribution terms for each program are described in the  
individual files in `/usr/share/doc/*/*copyright`.

VM g: Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by  
applicable law.

VM a: To run a command as administrator (user "root"), use "sudo <command>".  
See "man sudo\_root" for details.

Agen: fredrik@vm-germany-001:~\$

Host: Standard DS1 v2  
1  
3.5 GiB

Networking

IP address: 48.209.80.199 ( Network interface vm-germany-001929\_r3 )  
IP address (IPv6): -  
IP address: 10.0.1.4  
IP address (IPv6): -  
network/subnet: vnet-germany-001/development  
Configure

Image details

image publisher: canonical  
image offer: ubuntu-24\_04-lts  
image plan: server

vm-germany-001\_OsDisk\_1\_c1cbf7e031684fbd988fa8630667eba6

location at host: Disabled  
disk encryption: Not enabled

Tilslutt:

(Fra leksjonen) Merk at hvis tjenester innenfor ett VNET skal kommunisere med et annet VNET, må adresseområdene vurderes nøye for å sikre at de ikke overlapper hverandre. Dette er spesielt viktig hvis du bruker VNET-er til å utvide det private bedriftsnettverket til Azure. Adresseområder som overlapper hverandre kan forårsake ruting- og adresseringsproblemer.

Jeg mener IP-adressene bør være unike innenfor hele kombinasjonen av VNET og subnett, slik at det er enklere å finne ut hvor noe har gått galt hvis det oppstår feil i routing.

Dette var en veldig grei øving, som er en god forberedelse til neste øving. Det vi lærte her vil sikkert være nyttig hvis vi må feilsøke litt i konsollen underveis. Det ble litt kluss ved opprettelse av VM, men det var fordi det gikk litt fort i svingene.