

Practica 4: chat

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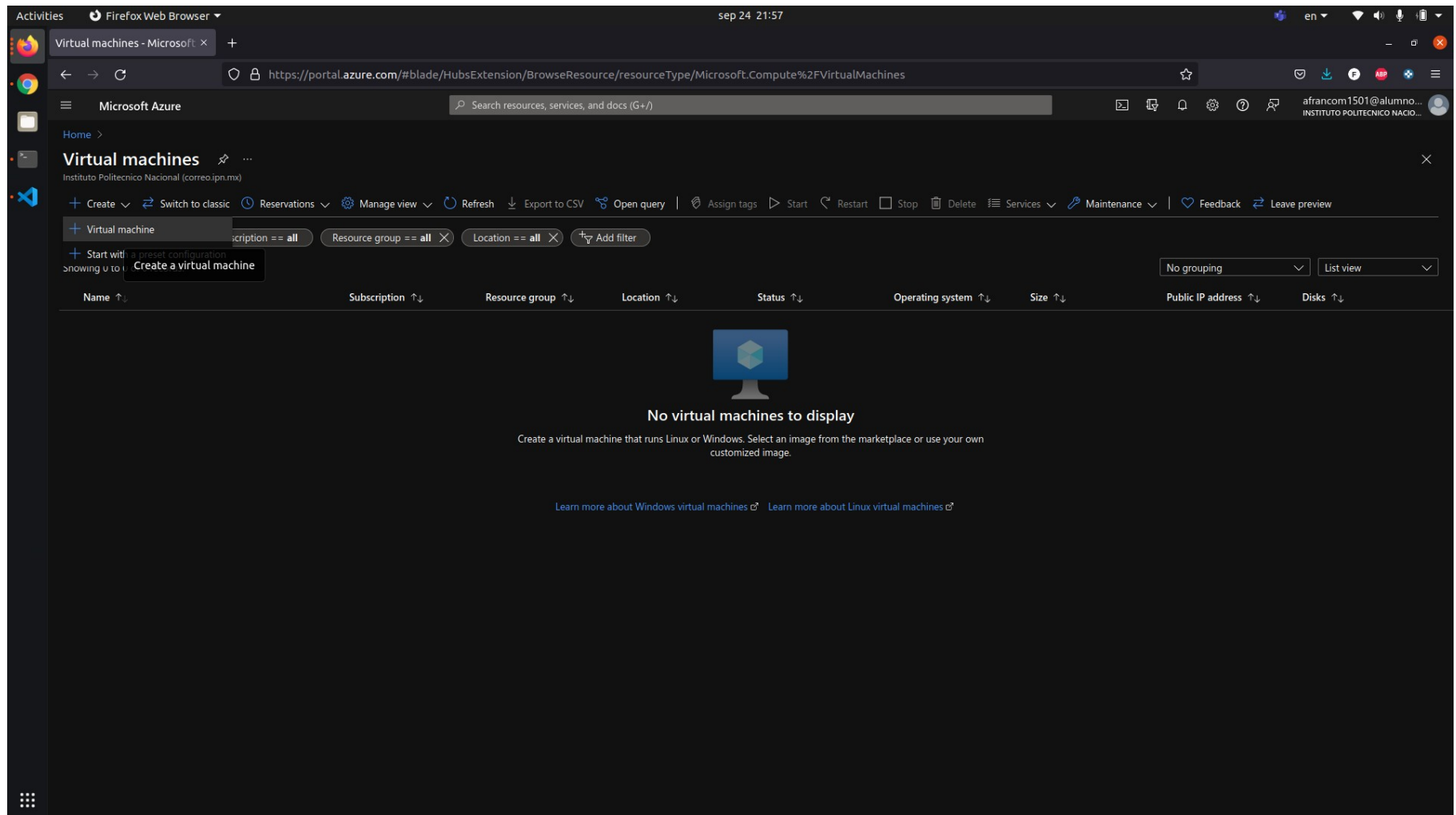
Grupo: 4CV14

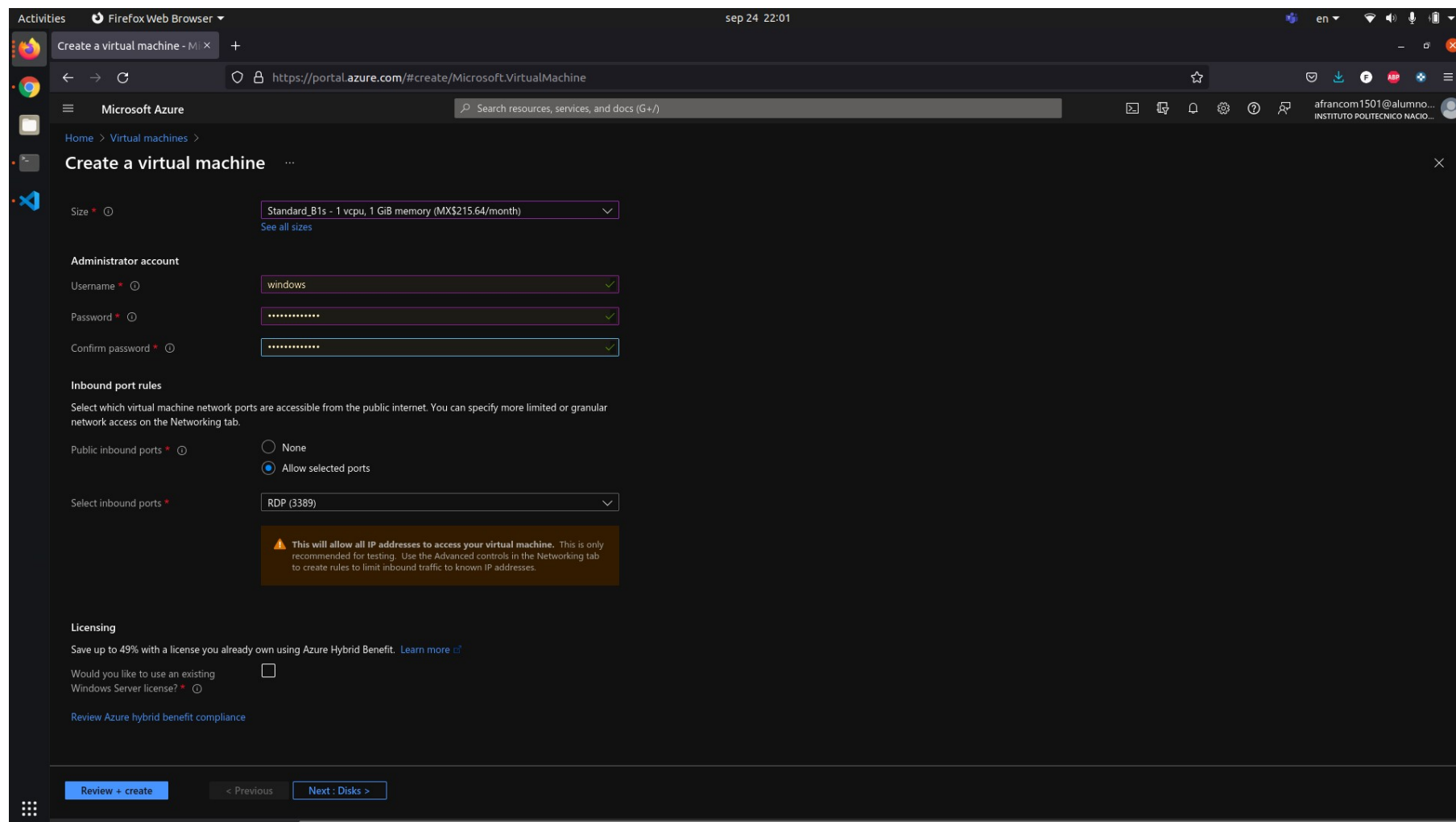
Materia: Desarrollo de Sistemas Distribuidos

Profesor: Pineda Guerrero Carlos

Sep 2021

Creacion de la maquina virtual:





Activities

Firefox Web Browser

sep 24 22:01

en

🔊 🔌 🔋 🔍

Create a virtual machine - Microsoft Azure

🏠 🔍 <https://portal.azure.com/#create/Microsoft.VirtualMachine> ⭐

📄 🔍 Search resources, services, and docs (G+/)

📧 🔔 ⚙️ ⓘ 🗨️

afra... 1501@alumno... INSTITUTO POLITECNICO NACIO...

🏠 > Virtual machines >

Create a virtual machine

🔍

Basics Disks Networking Management Advanced Tags Review + create

Azure VMs have one operating system disk and a temporary disk for short-term storage. You can attach additional data disks. The size of the VM determines the type of storage you can use and the number of data disks allowed. [Learn more](#)

Disk options

OS disk type ☐ Standard HDD (locally-redundant storage) ☐ Premium SSD (locally-redundant storage) ☐ Premium SSD (zone-redundant storage) ☐ Premium SSD (geo-redundant storage) ☐ Ultra Disk (locally-redundant storage) ☐ Ultra Disk (zone-redundant storage) ☐ Ultra Disk (geo-redundant storage)

The selected VM size supports premium disks. We recommend Premium SSD for high IOPS workloads. Virtual machines with Premium SSD disks qualify for the 99.9% connectivity SLA.

Encryption type * (Default) Encryption at-rest with a platform-managed key

Enable Ultra Disk compatibility ☐ Ultra disk is supported in Availability Zone(s) 1,2,3 for the selected VM size Standard_B1s.

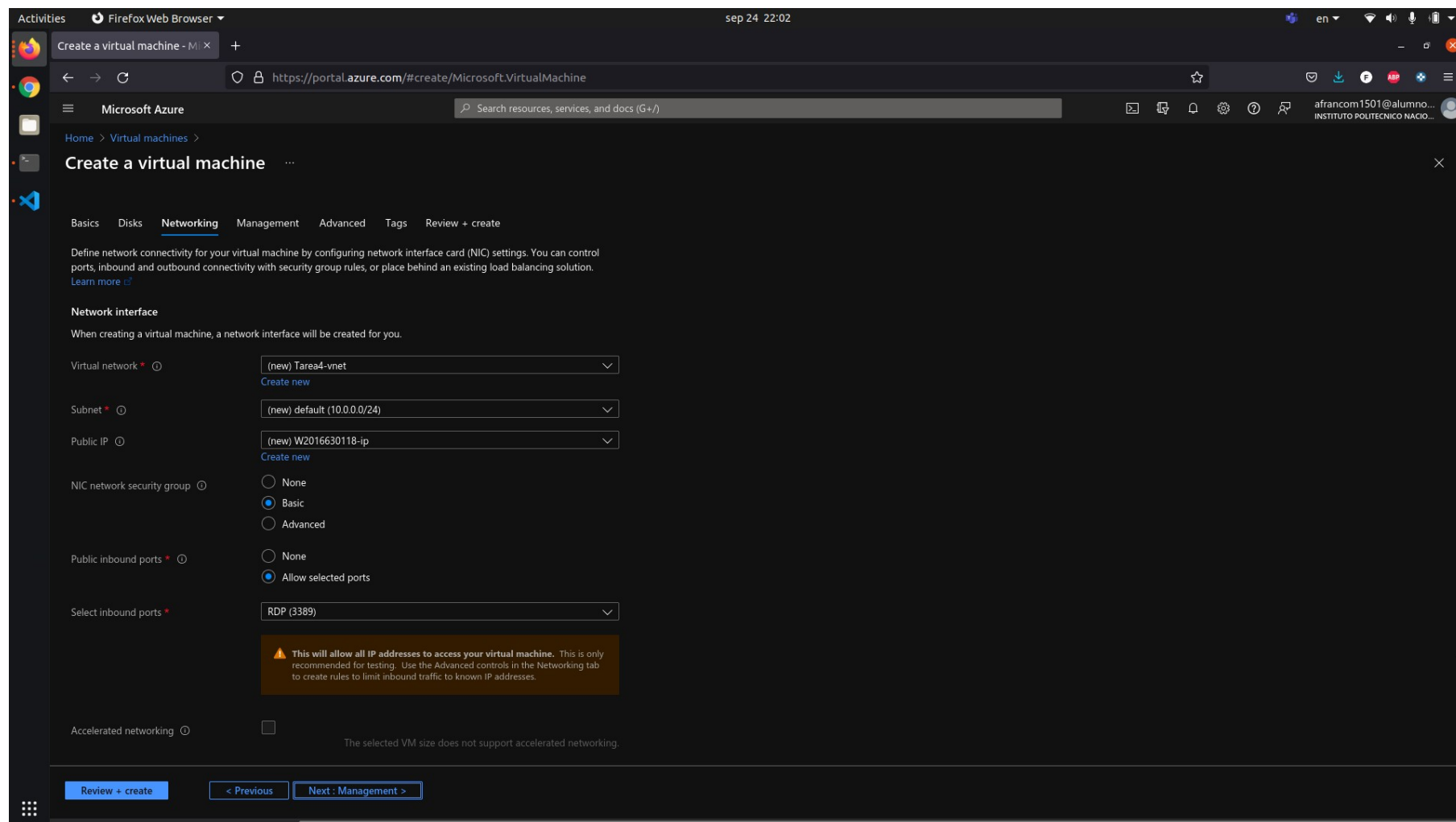
Data disks

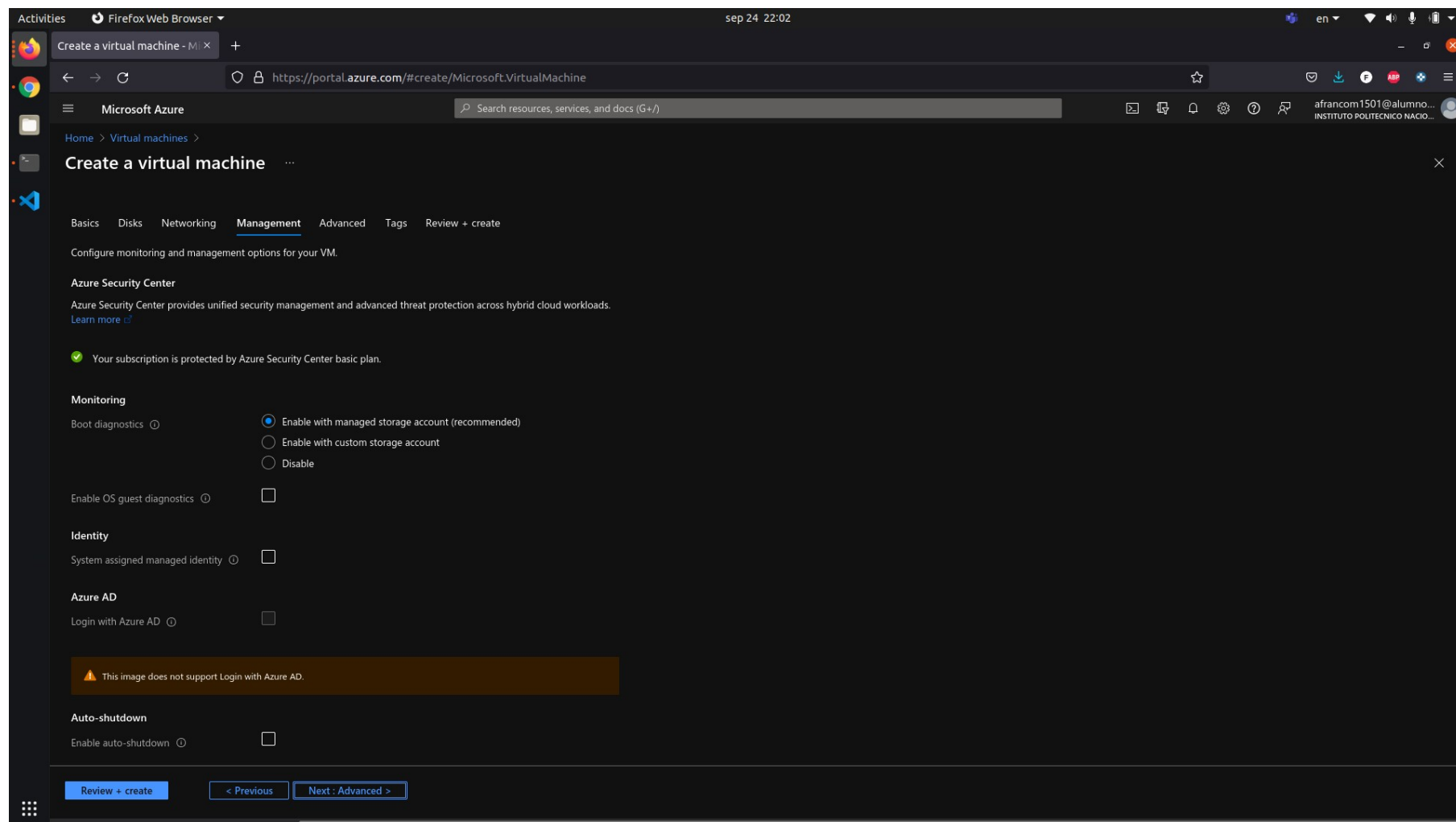
You can add and configure additional data disks for your virtual machine or attach existing disks. This VM also comes with a temporary disk.

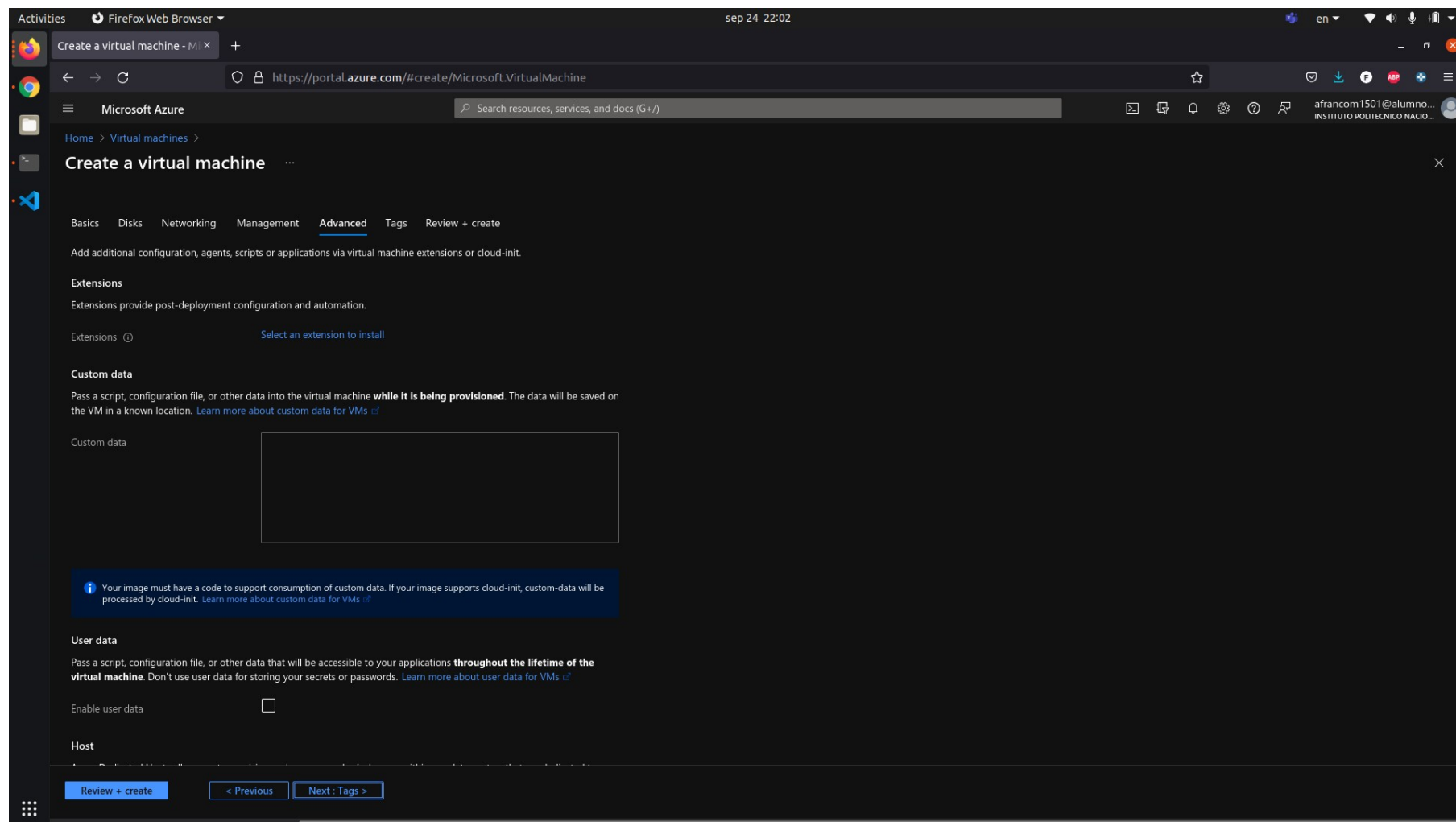
LUN	Name	Size (GiB)	Disk type	Host caching
Create and attach a new disk Attach an existing disk				

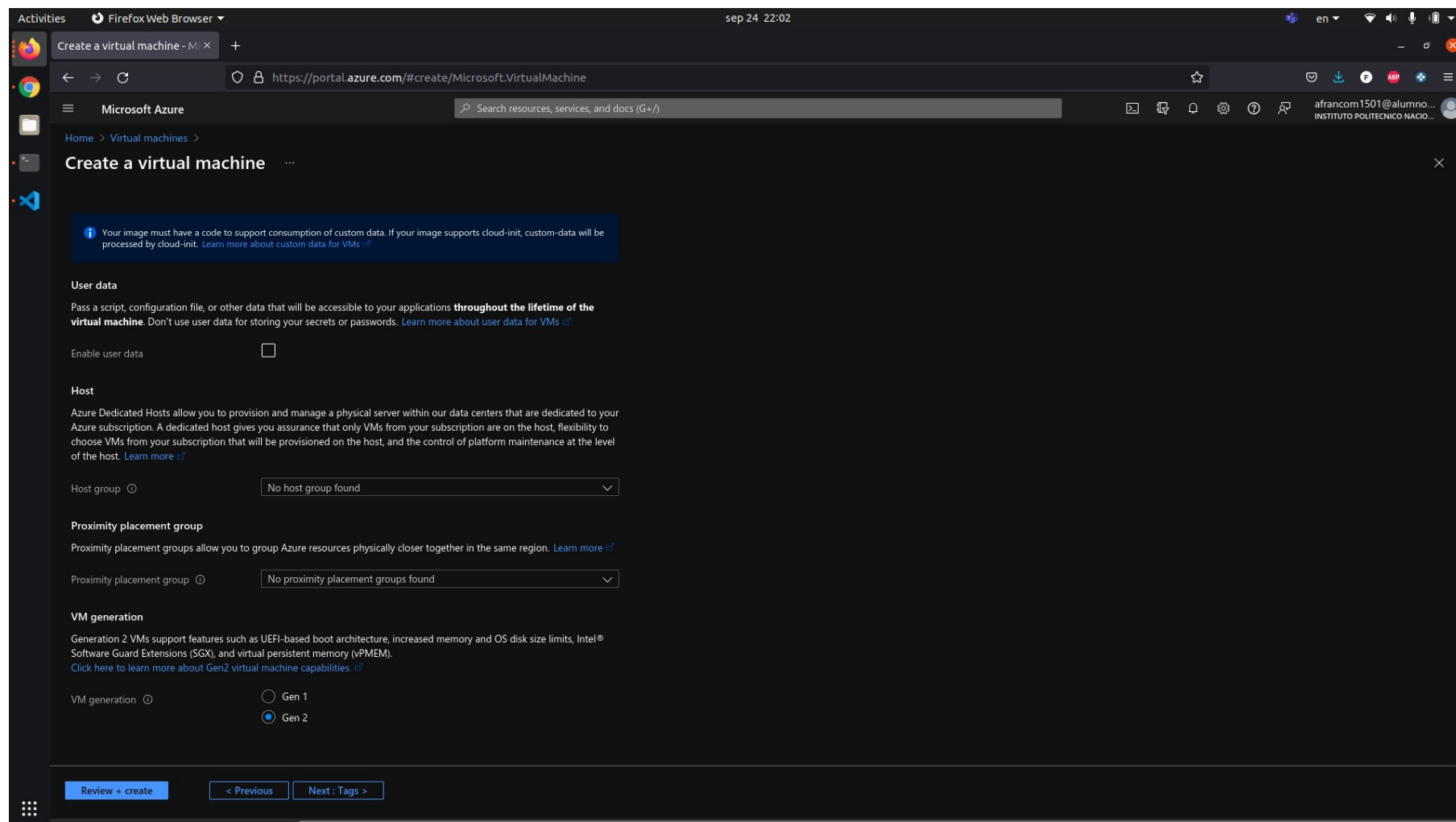
Advanced

Review + create < Previous Next : Networking >









The screenshot shows the Microsoft Azure portal interface. At the top, there's a navigation bar with the 'Microsoft Azure' logo and a search bar. Below it, the breadcrumb trail reads 'Home > Virtual machines >'. The main heading is 'Create a virtual machine'. A green banner indicates 'Validation passed'. The 'Review + create' tab is selected among others like Basics, Disks, Networking, Management, Advanced, Tags, and Review + create. Under 'PRODUCT DETAILS', it lists 'Standard B1s by Microsoft' with a price of '0.2954 MXN/hr'. There are links for 'Terms of use' and 'Privacy policy'. A 'TERMS' section contains legal disclaimer text. An orange warning box states: 'You have set RDP port(s) open to the internet. This is only recommended for testing. If you want to change this setting, go back to Basics tab.' At the bottom, the 'Basics' configuration summary is shown as a table:

Subscription	Azure para estudiantes
Resource group	(new) Tarea4
Virtual machine name	W2016630118
Region	East US
Availability options	No infrastructure redundancy required
Image	Windows Server 2012 R2 Datacenter - Gen2
Size	Standard B1s (1 vcpu, 1 GiB memory)
Username	administrator

The bottom of the page features three buttons: 'Create', '< Previous', and 'Next >', along with a link to 'Download a template for automation'.

The screenshot shows the Microsoft Azure portal interface for creating a new virtual machine. At the top, a green banner confirms 'Validation passed'. The main configuration area is divided into several sections: Subscription (Azure para estudiantes), Resource group ((new) Tarea4), Virtual machine name (W2016630118), Region (East US), Availability options (No infrastructure redundancy required), Image (Windows Server 2012 R2 Datacenter - Gen2), Size (Standard B1s (1 vcpu, 1 GiB memory)), Username (windows), Public inbound ports (RDP), and a license check (No). The 'Disks' section shows OS disk type as Standard HDD LRS, managed disks as Yes, and ephemeral OS disk as No. The 'Networking' section includes Virtual network ((new) Tarea4-vnet), Subnet ((new) default (10.0.0.0/24)), Public IP ((new) W2016630118-ip), Accelerated networking (Off), and a load balancing option (No). The 'Management' section shows Azure Security Center (Basic (free)), Boot diagnostics (On), and Extended boot diagnostics (Off). At the bottom, there are buttons for 'Create', '< Previous', 'Next >', and 'Download a template for automation'.

Activities

Firefox Web Browser

sep 24 22:03

CreateVm-MicrosoftWindowsServer-201-20210924220018 | Overview

Deployment

Search (Ctrl+/)

Overview

Inputs

Outputs

Template

Home

Microsoft Azure

Search resources, services, and docs (G+)

afancom1501@alumno... INSTITUTO POLITECNICO NACIO...

Deployment details (Download)

Resource	Type	Status	Operation details
Tarea4-vnet	Microsoft.Network/virtualNetworks	Created	Operation details
W2016630118-nsg	Microsoft.Network/networkSecurityGroups	Created	Operation details
W2016630118-ip	Microsoft.Network/publicIpAddresses	OK	Operation details

Deployment name: CreateVm-MicrosoftWindowsServer.WindowsS...
Subscription: Azure para estudiantes
Resource group: Tarea4

Start time: 9/24/2021, 10:03:22 PM
Correlation ID: bee5bbd3-34e6-49d1-b1a0-ae8f50e42c9

Security Center

Secure your apps and infrastructure
Go to Azure security center >

Free Microsoft tutorials

Start learning today >

Work with an expert

Azure experts are service provider partners who can help manage your assets on Azure and be your first line of support.
Find an Azure expert >

Activities Firefox Web Browser sep 24 22:04

CreateVm-MicrosoftWindowsServer-201-20210924220018 | Overview

Deployment

Search (Ctrl+/) Delete Cancel Redeploy Refresh

We'd love your feedback! →

Deployment is in progress

Deployment name: CreateVm-MicrosoftWindowsServer.WindowsS... Start time: 9/24/2021, 10:03:22 PM
Subscription: Azure para estudiantes Correlation ID: bee5bbd3-34e6-49d1-b1a0-ae8f50e42c9
Resource group: Tarea4

Deployment details (Download)

Resource	Type	Status	Operation detail
W2016630118	Microsoft.Compute/virtualMachines	Created	Operation detail
w2016630118613	Microsoft.Network/networkInterfaces	Created	Operation detail
Tarea4-vnet	Microsoft.Network/virtualNetworks	OK	Operation detail
W2016630118-nsg	Microsoft.Network/networkSecurityGroups	OK	Operation detail
W2016630118-ip	Microsoft.Network/publicIpAddresses	OK	Operation detail

Notifications

More events in the activity log → Dismiss all

Deployment in progress... Running X

Deployment to resource group 'Tarea4' is in progress.

a few seconds ago

Ejecucion de la maquina virtual

Activities Firefox Web Browser sep 24 22:04

CreateVm-MicrosoftWindowsServer-201-20210924220018 | Overview

Deployment

Search (Ctrl+/) Delete Cancel Redeploy Refresh

We'd love your feedback! →

Deployment is in progress

Deployment name: CreateVm-MicrosoftWindowsServer:WindowsS... Start time: 9/24/2021, 10:03:22 PM
Subscription: Azure para estudiantes Correlation ID: bee5bbd3-34e6-49d1-b1a0-ae8f50e42c9
Resource group: Tarea4

Deployment details (Download)

Resource	Type	Status	Operation detail
W2016630118	Microsoft.Compute/virtualMachines	Created	Operation detail
w2016630118613	Microsoft.Network/networkInterfaces	Created	Operation detail
Tarea4-vnet	Microsoft.Network/virtualNetworks	OK	Operation detail
W2016630118-nsg	Microsoft.Network/networkSecurityGroups	OK	Operation detail
W2016630118-ip	Microsoft.Network/publicIpAddresses	OK	Operation detail

Notifications

More events in the activity log → Dismiss all

Deployment in progress... Running ×
Deployment to resource group 'Tarea4' is in progress.
a few seconds ago

Activities Remmina sep 24 22:08

W2016630118 - Microsoft A... Logins & Passwords

https://portal.azure.com/#@correo.ipn.mx/resource/subscriptions/3faaaa4e-e8e5-45c4-baf9-99ec851aece/resourcegroups/Tarea4/providers/Microsoft.Compute/virtualM...

Remmina Remote Desk... Remote Desktop Client

RDP 23.96.56.124

Enter RDP authentication credentials

Username windows

Password

Domain

Save password

OK Cancel

23.96.56.124

Ready

Size

Size Standard B1s

vCPUs 1

RAM 1 GiB

Disk

OS disk W2016630118_OsDisk_1_cf2c3f333d0147dc84294eb325e822b3

Azure disk encryption Not enabled

Ephemeral OS disk N/A

Data disks 0

Overview

Activity log

Access control

Tags

Diagnose

Settings

Networking

Connect

Disks

Size

Security

Advisor recommendations

Extensions

Continuous delivery

Availability + scaling

Configuration

Identity

Properties

Locks

Operations

Bastion

Auto-shutdown

Backup

Computer name

Operating system

Publisher

Offer

Plan

VM generation

Agent status

Agent version 2.7.41491.1024

Host group None

Host

Proximity placement group

Colocation status N/A

Capacity reservation group

Availability + scaling

Availability zone

Scale Set

Activities Remmina sep 24 22:08

W2016630118 - Microsoft A... Logins & Passwords

https://portal.azure.com/#@correo.ipn.mx/resource/subscriptions/3faaaa4e-e8e5-45c4-baf9-99ec851aece/resourcegroups/Tarea4/providers/Microsoft.Compute/virtualM...

Remmina Remote Desk... Remote Desktop Client

RDP 23.96.56.124

Name Group Server Plugin Last used

Connect

Total 0 items.

Computer name Operating system Publisher Offer Plan VM generation Agent status Agent version Host group Host Proximity placement group Colocation status Capacity reservation group

Ready 2.7.41491.1024 None - - N/A -

Availability + scaling Availability zone Scale Set

Size Standard B1s vCPUs 1 RAM 1 GiB

Disk OS disk W2016630118_OsDisk_1_cf2c3f333d0147dc84294eb325e822b3 Azure disk encryption Not enabled Ephemeral OS disk N/A Data disks 0

Windows Please wait for the User Profile Service

Windows Server 2012 R2

JSON View

ar 2012 R2 Datacenter) GiB memory)

124

net/default

Activities Remmina sep 24 22:09

W2016630118 - Microsoft A... Logins & Passwords

https://portal.azure.com/#@correo.ipn.mx/resource/subscriptions/3faaaa4e-e8e5-45c4-baf9-99ec851aece/resourcegroups/Tarea4/providers/Microsoft.Compute/virtualM...

23.96.56.124

Server Manager

Server Manager Dashboard

WELCOME TO SERVER MANAGER

1 Configure this local server

2 Add roles and features

3 Add other servers to manage

4 Create a server group

5 Connect this server to cloud services

QUICK START

WHAT'S NEW

LEARN MORE

ROLES AND SERVER GROUPS

Roles: 1 | Server groups: 1 | Servers total: 1

File and Storage Services	Local Server	All Servers
1	1	1
Manageability	Manageability	Manageability
Events	Events	Events
Performance	Services	Services
BPA results	Performance	Performance

3:09 AM 9/25/2021

Operations

Bastion

Auto-shutdown

Backup

Availability + scaling

Availability zone

Scale Set

Capacity reservation group

OS disk

Azure disk encryption

Ephemeral OS disk

Data disks

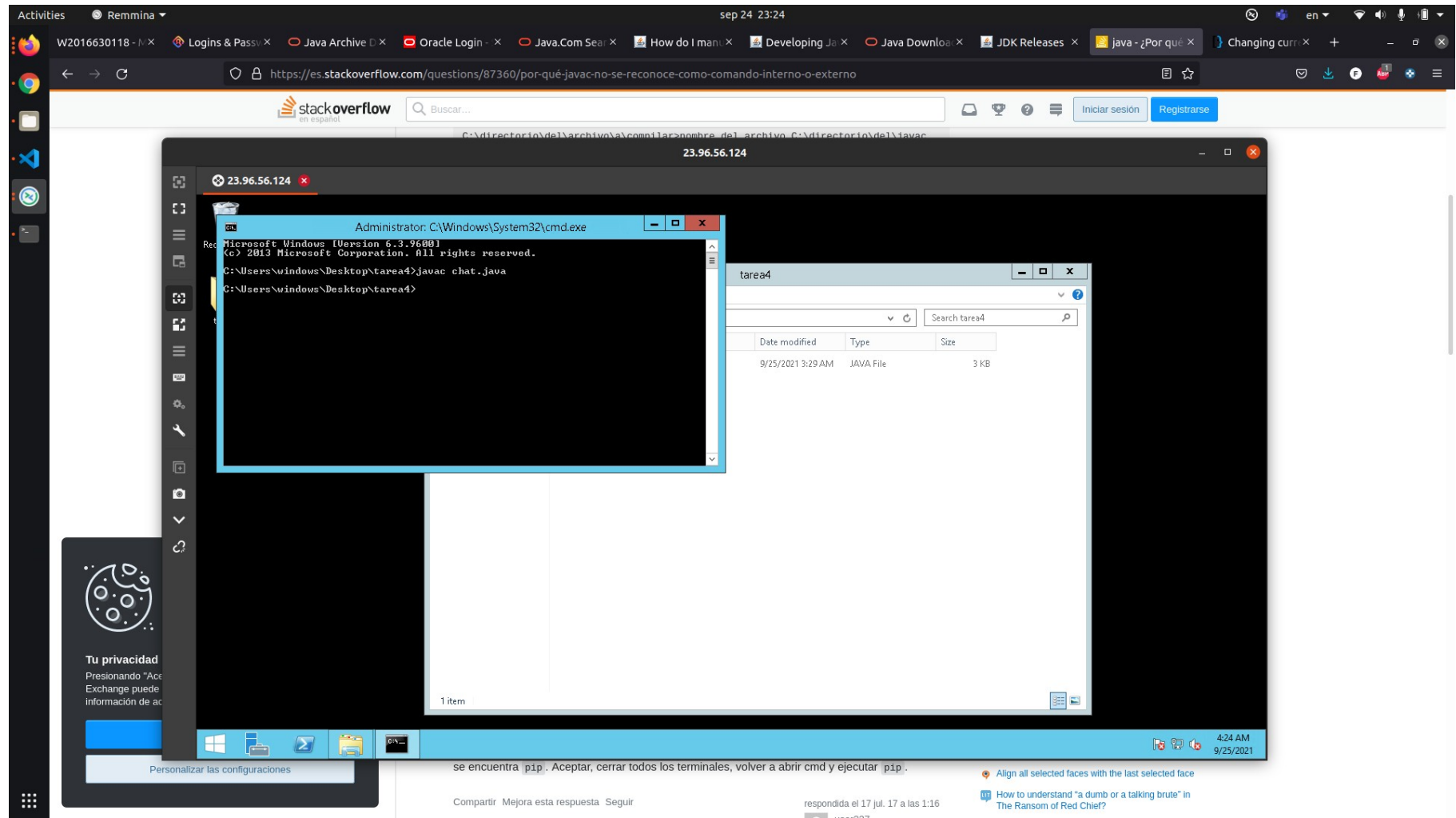
W2016630118_OsDisk_1_cf2c3f333d0147dc84294eb325e822b3

Not enabled

N/A

0

Compilación del código en la maquina virtual



Ejecución y resultados

The screenshot displays a remote desktop session with three terminal windows. The top bar shows the date and time as 'sep 24 23:29' and the IP address '23.96.56.124'. The left sidebar contains various application icons. The three terminal windows show the following chat logs:

Window 1: Administrator: C:\Windows\System32\cmd.exe - java chat Hugo

```
C:\Users\windows\Desktop\tarea4>java chat Hugo
Ingrese el mensaje a enviar:hola a todos
Hugo:hola a todos

Ingrese el mensaje a enviar:paco:hola hugo
Luis:hola hugo

sabes donde sera la fiesta?
Hugo:sabes donde sera la fiesta?

Ingrese el mensaje a enviar:paco:sera en mi casa
a que hora?
Hugo:a que hora?

Ingrese el mensaje a enviar:Luis:a las 7 PM
adios
Hugo:adios

Ingrese el mensaje a enviar:paco:adios hugo
Luis:adios hugo
```

Window 2: Administrator: C:\Windows\System32\cmd.exe - java chat paco

```
C:\Users\windows\Desktop\tarea4>java chat paco
Ingrese el mensaje a enviar:Hugo:hola a todos

hola hugo
paco:hola hugo

Ingrese el mensaje a enviar:Luis:hola hugo
Hugo:sabes donde sera la fiesta?

sera en mi casa
paco:sera en mi casa

Ingrese el mensaje a enviar:Hugo:a que hora?
Luis:a las 7 PM

Hugo:adios
adios hugo
paco:adios hugo

Ingrese el mensaje a enviar:Luis:adios hugo
```

Window 3: Administrator: C:\Windows\System32\cmd.exe - java chat Luis

```
C:\Users\windows\Desktop\tarea4>java chat Luis
Ingrese el mensaje a enviar:Hugo:hola a todos

paco:hola hugo
hola hugo
Luis:hola hugo

Ingrese el mensaje a enviar:Hugo:sabes donde sera la fiesta?
paco:sera en mi casa

Hugo:a que hora?
a las 7 PM
Luis:a las 7 PM

Ingrese el mensaje a enviar:Hugo:adios
paco:adios hugo

adios hugo
Luis:adios hugo

Ingrese el mensaje a enviar:
```

The bottom taskbar shows the Windows Start button, several application icons, and the system clock displaying '4:29 AM 9/25/2021'.

Conclusiones:

Tuve algunos inconvenientes a la hora de la instalacion del jdk ya que windows no me lo permitia al principio, tuve que eliminar algunas configuraciones de seguridad para que me lo permitiera. Con respecto al programa, se tiene que pensar bien en que partes utilizar el synchronized para que no se crucen los mensajes o los textos entre los mensajes, es algo que no logre arreglar para la entrega, sin embargo logre todos los demas objetivos.

