Azure Setup

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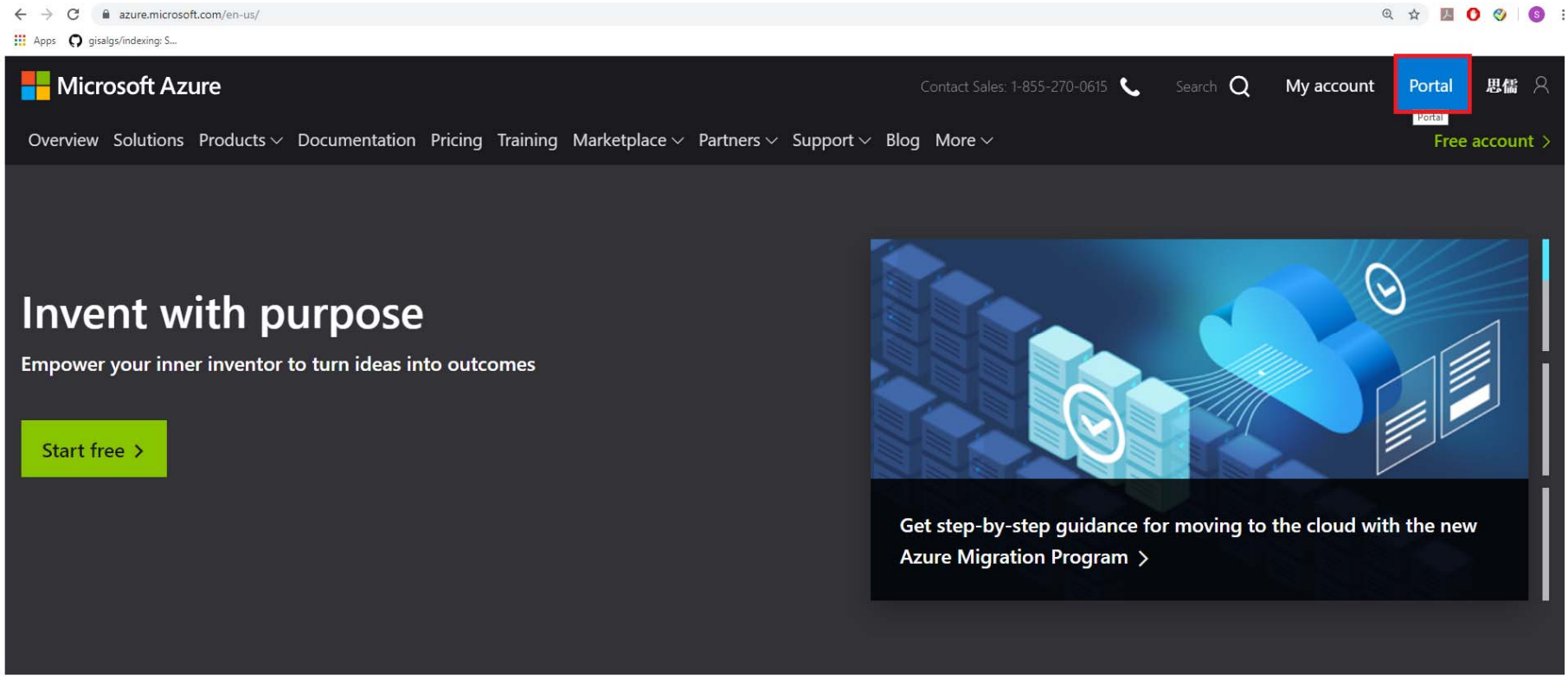
Agenda

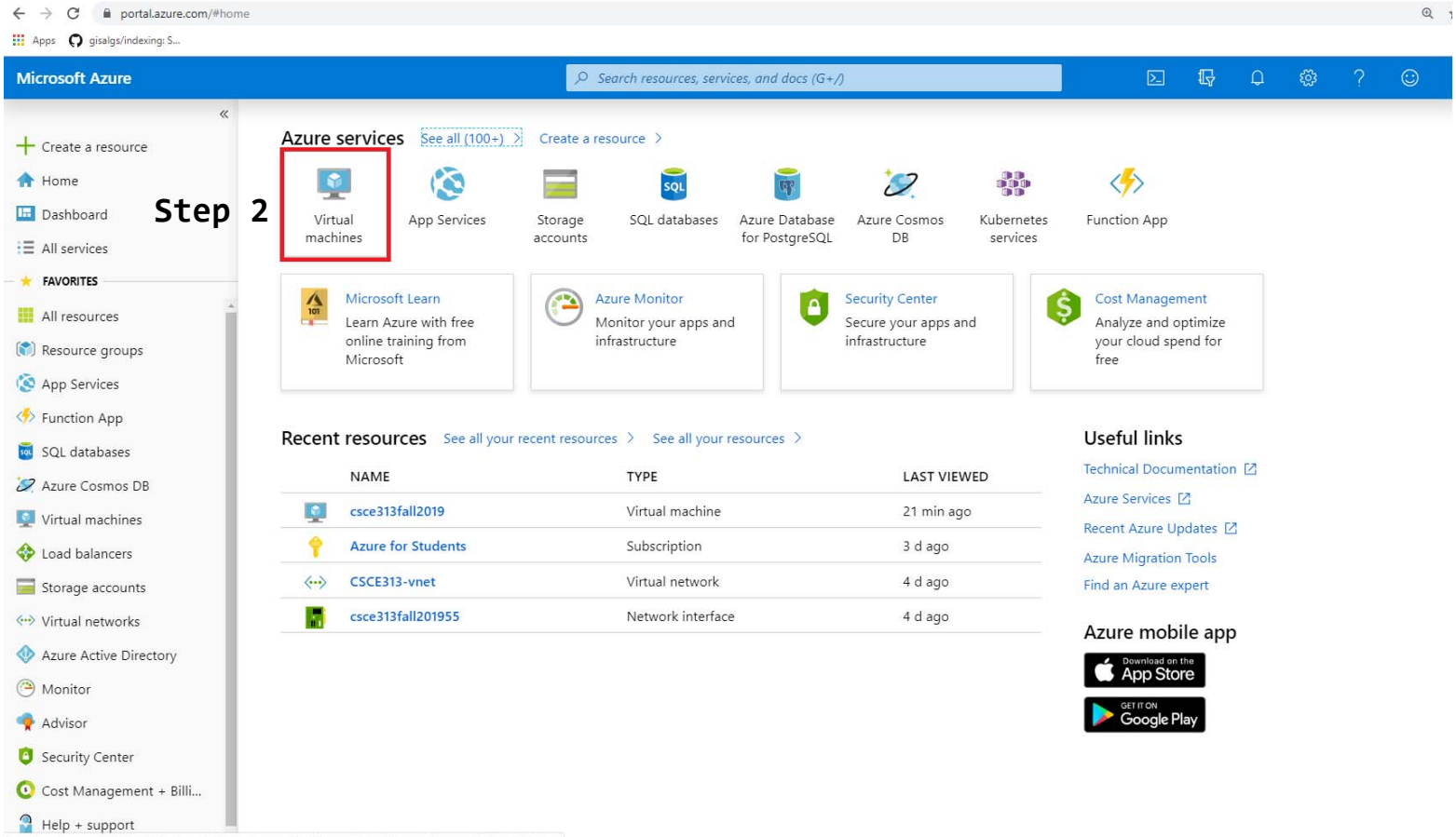
- Sign up for Azure and active $100 credit for students here: https://azure.microsoft.com/en-us/free/free-account-students-faq/
- Create Virtual Machine (VM)
- Remote Desktop Protocol (RDP)
- Install Visual Studio 2019 Community

Create VM

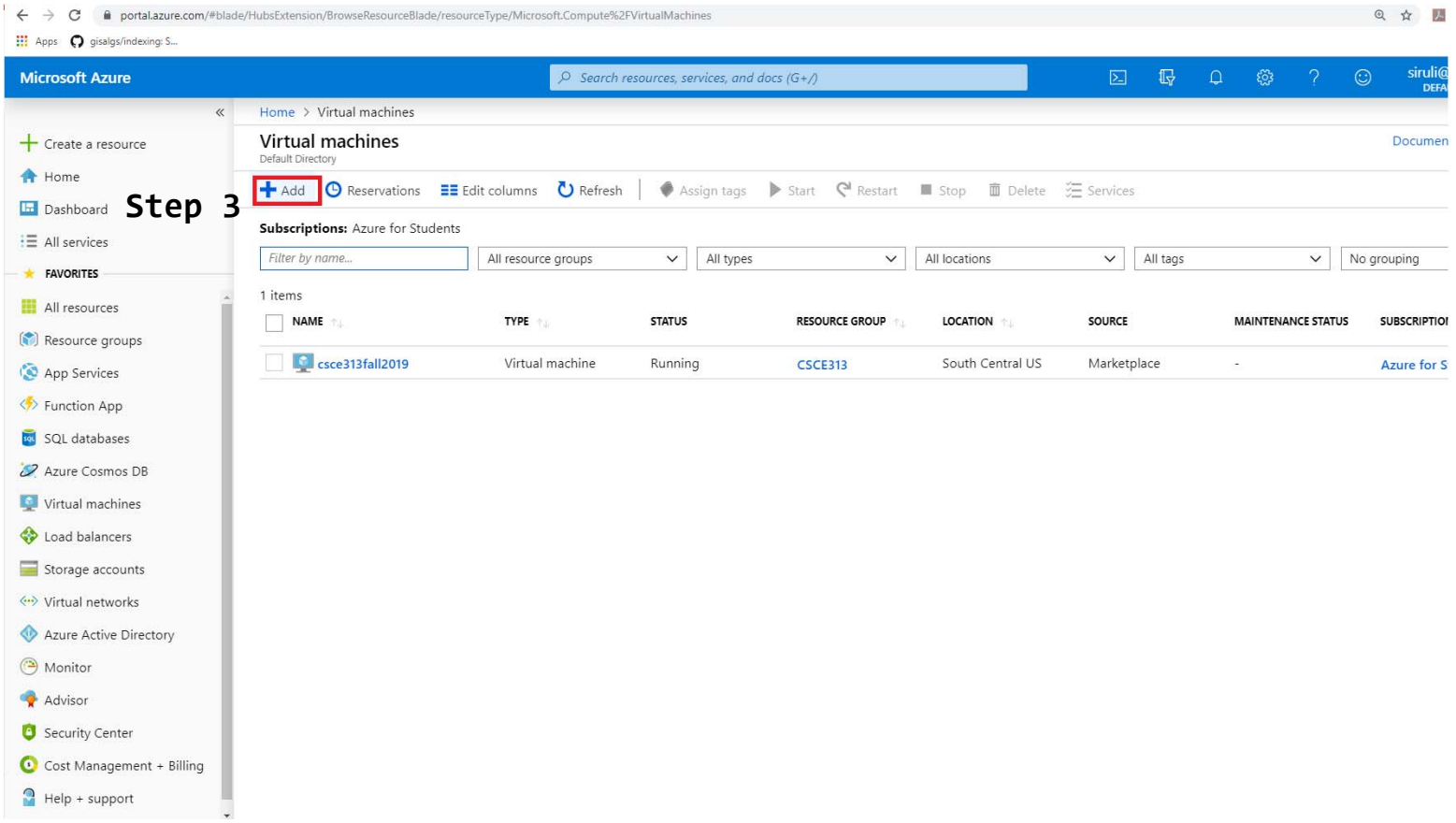
Step 1



Create VM


portal.azure.com/#home
Apps
gisalgs/indexing: S...
Microsoft Azure
Search resources, services, and docs (G+/)
Create a resource
Home
Dashboard
All services
FAVORITES
All resources
Resource groups
App Services
Function App
SQL databases
Azure Cosmos DB
Virtual machines
Load balancers
Storage accounts
Virtual networks
Azure Active Directory
Monitor
Advisor
Security Center
Cost Management + Billi...
Help + support
Step 2
Azure services
See all (100+)
Create a resource
Virtual machines
App Services
Storage accounts
SQL databases
Azure Database for PostgreSQL
Azure Cosmos DB
Kubernetes services
Function App
Microsoft Learn
Learn Azure with free online training from Microsoft
Azure Monitor
Monitor your apps and infrastructure
Security Center
Secure your apps and infrastructure
Cost Management
Analyze and optimize your cloud spend for free
Recent resources
See all your recent resources
See all your resources
NAME
TYPE
LAST VIEWED
csce313fall2019
Virtual machine
21 min ago
Azure for Students
Subscription
3 d ago
CSCE313-vnet
Virtual network
4 d ago
csce313fall201955
Network interface
4 d ago
Useful links
Technical Documentation
Azure Services
Recent Azure Updates
Azure Migration Tools
Find an Azure expert
Azure mobile app
Download on the App Store
GET IT ON Google Play
https://portal.azure.com/#blade/HubsExtension/BrowseResourceBlade/resourceType/Microsoft.Compute%2FVirtualMachines

Create VM


portal.azure.com/#blade/HubsExtension/BrowseResourceBlade/resourceType/Microsoft.Compute%2FVirtualMachines
Microsoft Azure
Search resources, services, and docs (G+/)
Step 3
Home > Virtual machines
Virtual machines
Default Directory
Add
Reservations
Edit columns
Refresh
Assign tags
Start
Restart
Stop
Delete
Services
Subscriptions: Azure for Students
Filter by name...
All resource groups
All types
All locations
All tags
No grouping
1 items
NAME
TYPE
STATUS
RESOURCE GROUP
LOCATION
SOURCE
MAINTENANCE STATUS
csce313fall2019
Virtual machine
Running
CSCE313
South Central US
Marketplace
-
Create a resource
Home
Dashboard
All services
FAVORITES
All resources
Resource groups
App Services
Function App
SQL databases
Azure Cosmos DB
Virtual machines
Load balancers
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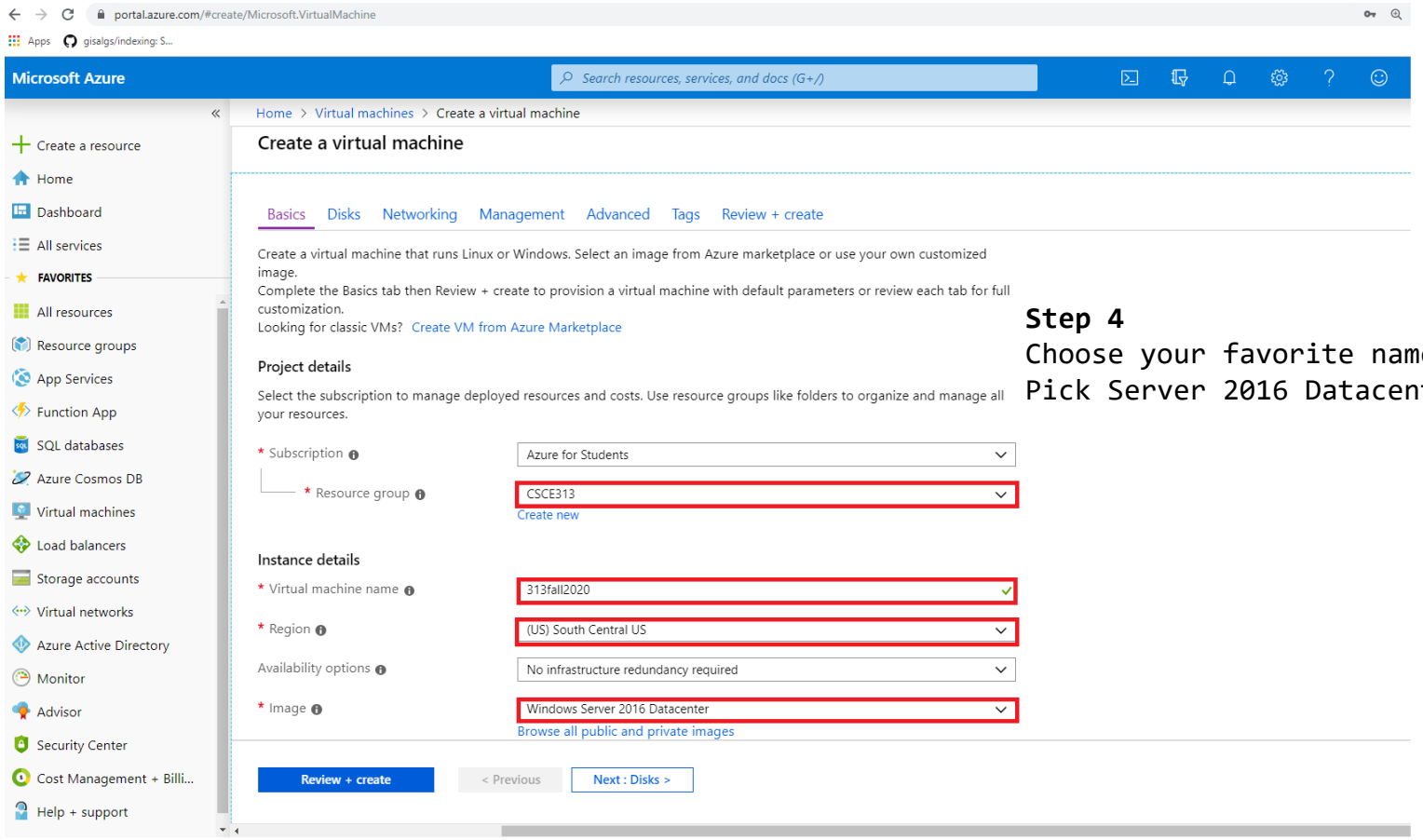
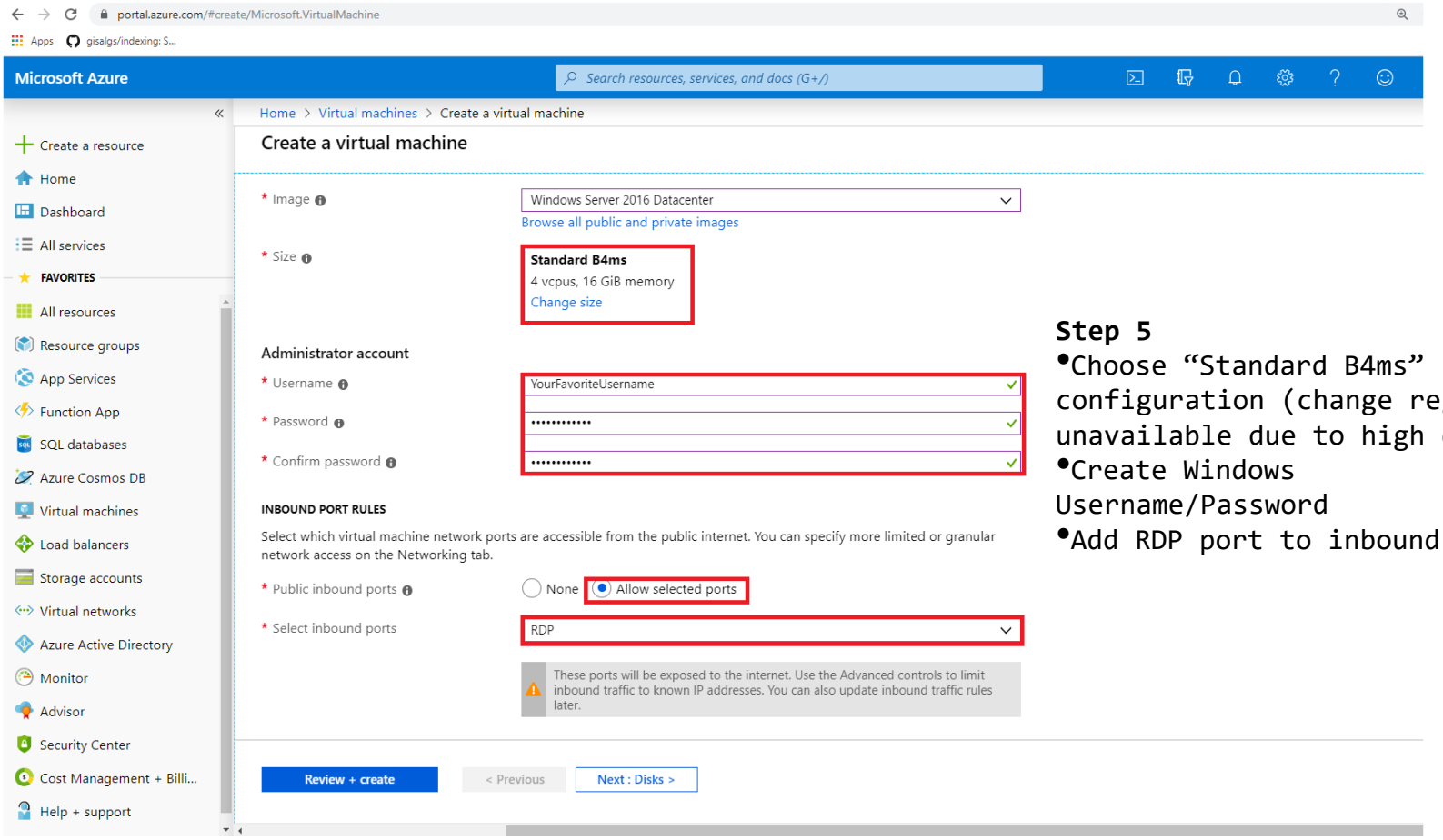
Create VM



Step 4
Choose your favorite names
Pick Server 2016 Datacenter

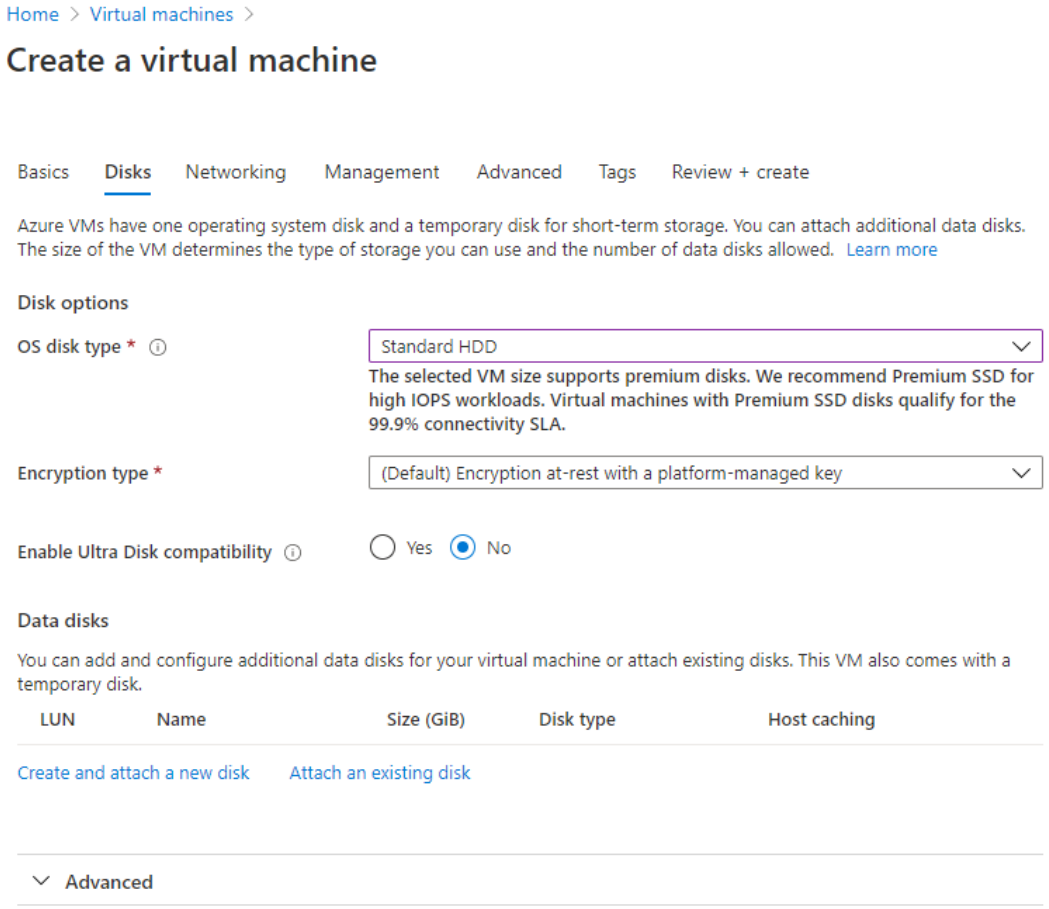
Create VM



Step 5

- Choose "Standard B4ms" configuration (change region if unavailable due to high demand)
- Create Windows Username/Password
- Add RDP port to inbound rule

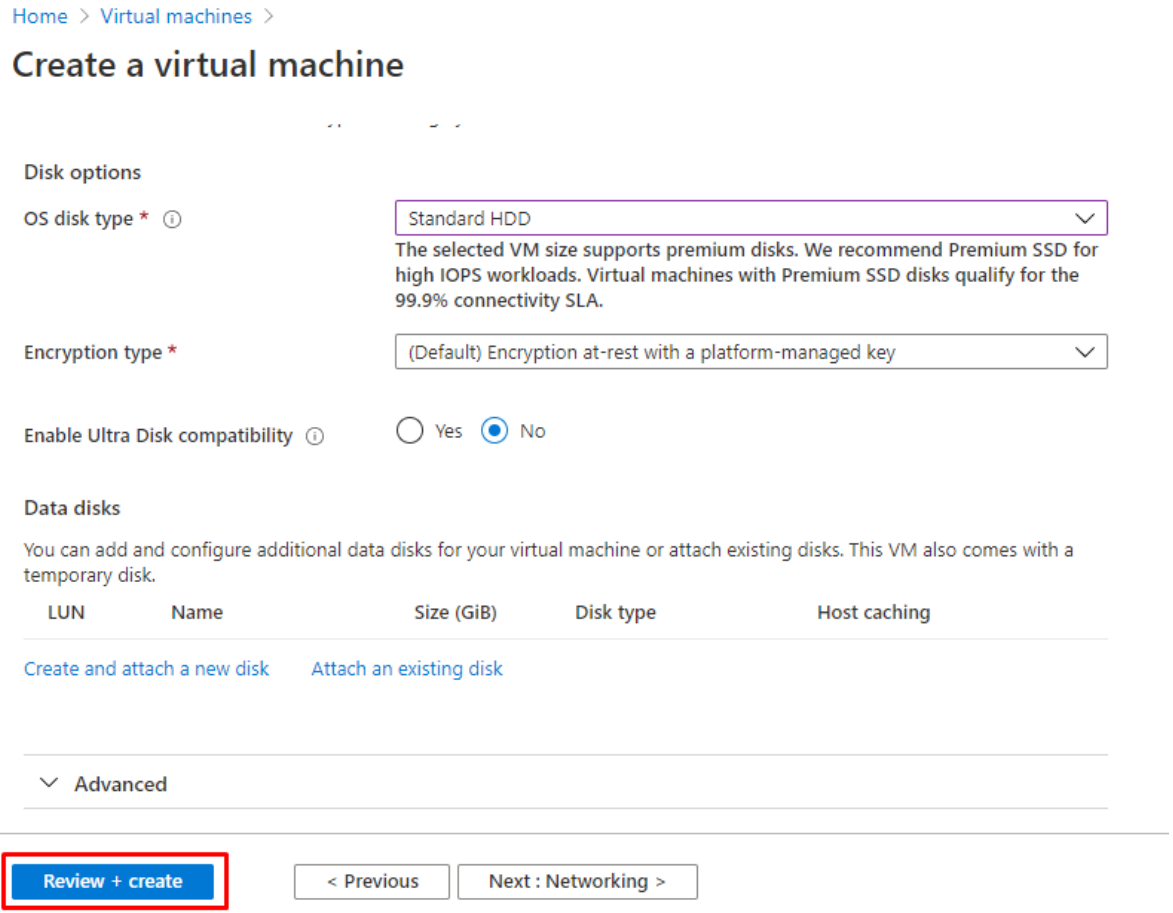
Create VM



Step 6

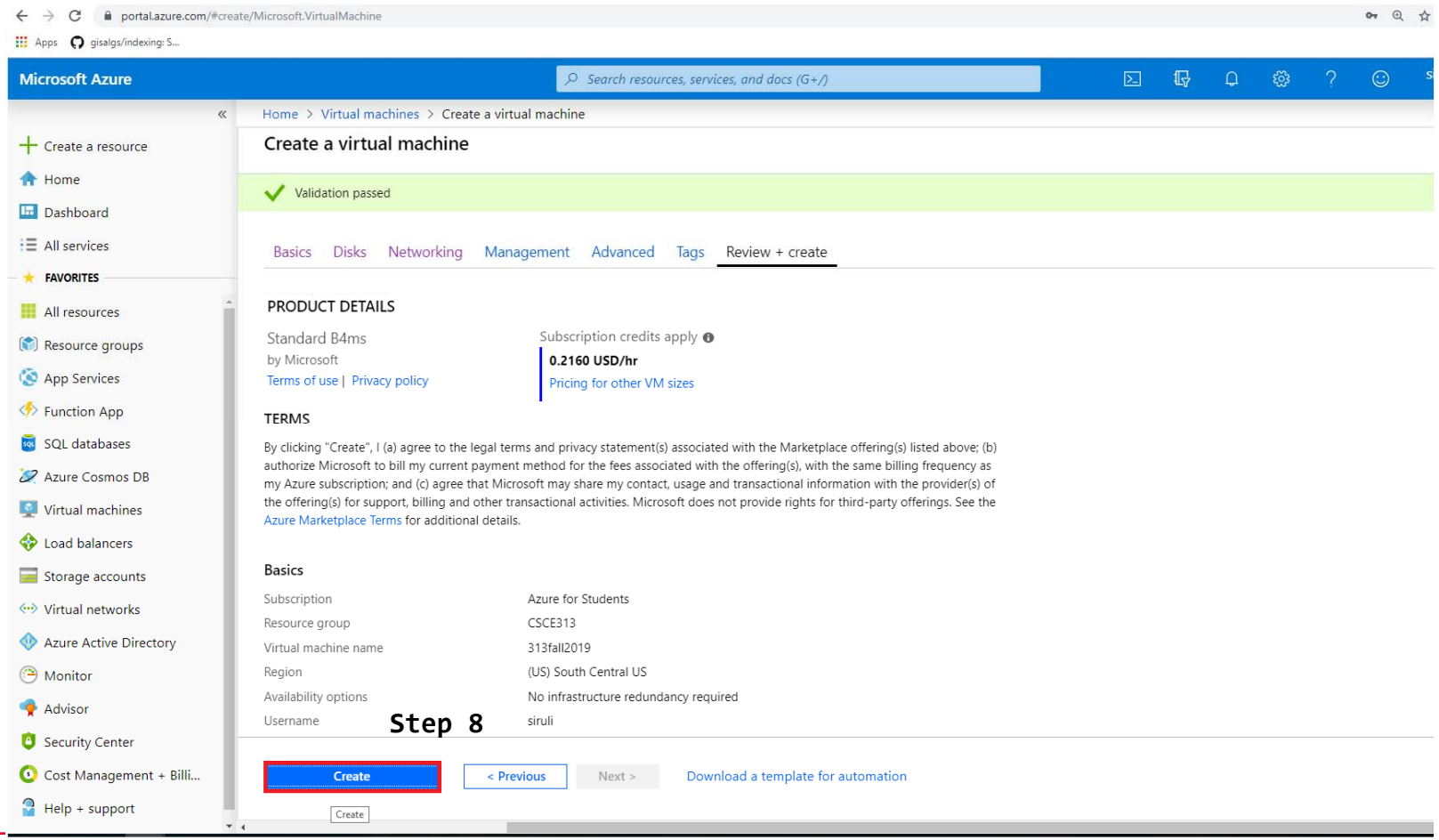
- Pick Standard HDD for OS disk type; SSD will eat up your credits quickly
- You can add additional data disks, but that is not necessary for this class

Create VM



Step 7

Create VM


portal.azure.com/#create/Microsoft.VirtualMachine
Microsoft Azure
Search resources, services, and docs (G+/)
Home > Virtual machines > Create a virtual machine
Create a virtual machine
Validation passed
Basics Disks Networking Management Advanced Tags Review + create
PRODUCT DETAILS
Standard B4ms
by Microsoft
Terms of use | Privacy policy
Subscription credits apply
0.2160 USD/hr
Pricing for other VM sizes
TERMS
By clicking "Create", I (a) agree to the legal terms and privacy statement(s) associated with the Marketplace offering(s) listed above; (b) authorize Microsoft to bill my current payment method for the fees associated with the offering(s), with the same billing frequency as my Azure subscription; and (c) agree that Microsoft may share my contact, usage and transactional information with the provider(s) of the offering(s) for support, billing and other transactional activities. Microsoft does not provide rights for third-party offerings. See the Azure Marketplace Terms for additional details.
Basics
Subscription Azure for Students
Resource group CSCE313
Virtual machine name 313fall2019
Region (US) South Central US
Availability options No infrastructure redundancy required
Username siruli
Step 8
Create
< Previous
Next >
Download a template for automation
Create a resource
Home
Dashboard
All services
FAVORITES
All resources
Resource groups
App Services
Function App
SQL databases
Azure Cosmos DB
Virtual machines
Load balancers
Storage accounts
Virtual networks
Azure Active Directory
Monitor
Advisor
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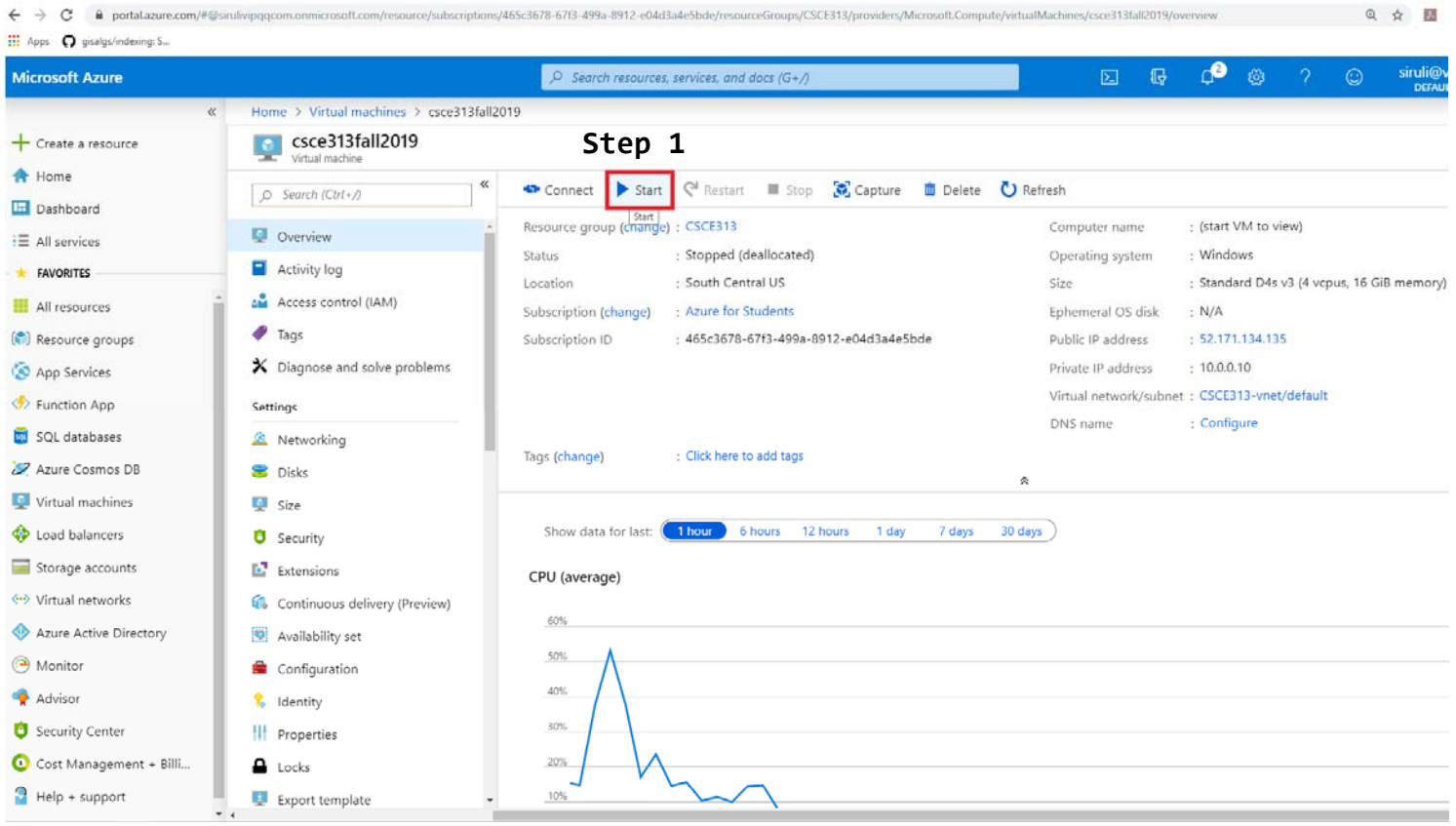
Cost Management + Billi...
Help + support

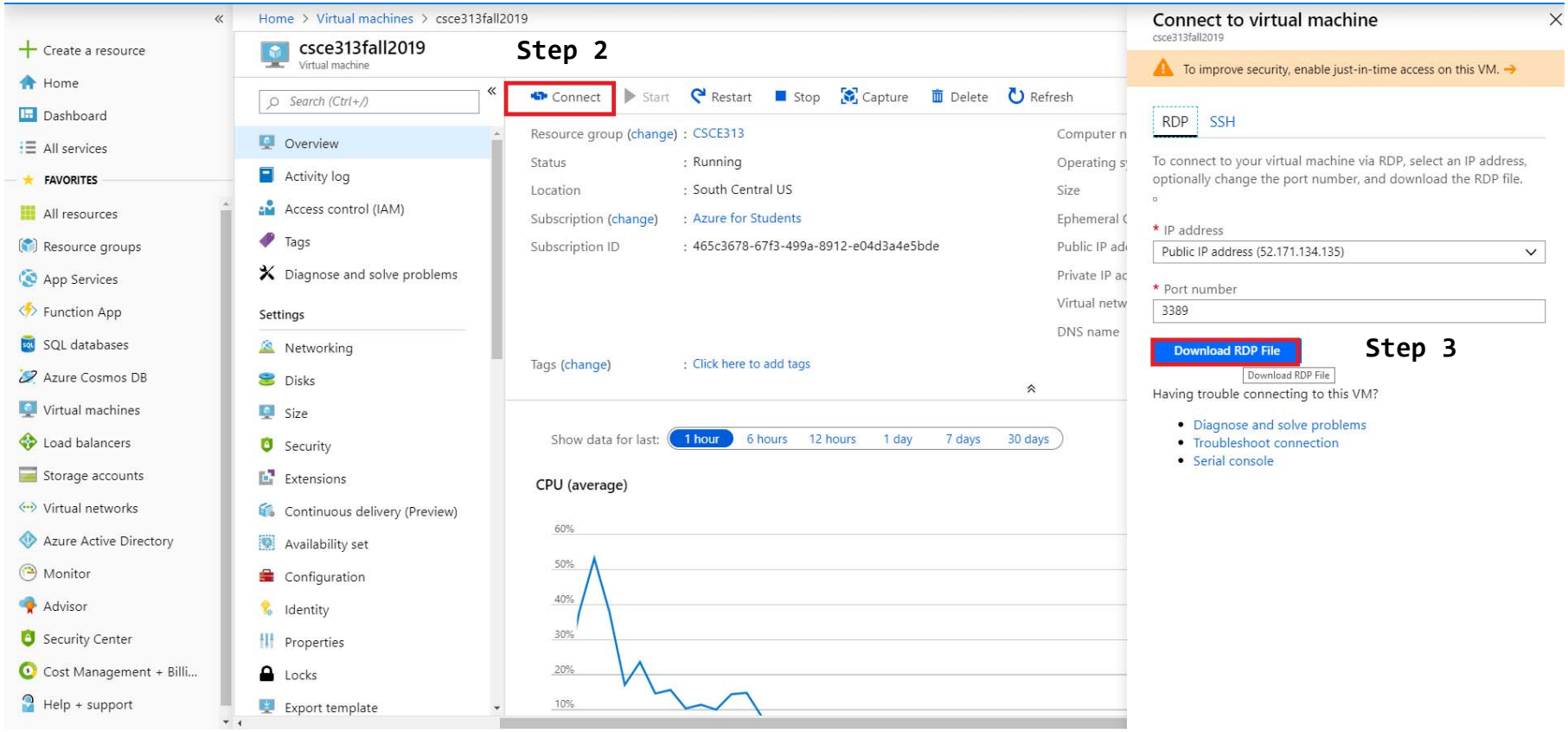
Remote Desktop

- RDP is a protocol developed by Microsoft that allows you to remote access a Windows machine with GUI
- Port 3389
- Client side runs on Windows, OS X, Linux, Android, iOS, browser: literally anywhere
- **Now you should be able to see to your VM!**

Remote Desktop



Remote Desktop



Remote Desktop

- Now a VM_Name.rdp file will be downloaded
- Install the Remote Desktop client if you are not on Windows
- Open the file
- Connect and enter the username/password you just created for your Windows VM

Visual Studio

- Install Visual Studio 2019 Community once logged in to VM

Important: Shutdown your VM!

- You are being billed as long as the VM is running, even when you are disconnected from the remote desktop.
- **MAKE SURE YOU SHUTDOWN YOUR VM AFTER USE**
- $100 / 0.216 per hour = 463 hrs = 19 days
- There is an auto-shutdown option (have not verified)

FAQs

Q: I am trying to connect my VM, why do I not see the RDP option?

A: Make sure your Image is Windows 2016 Datacenter, and not a Linux distribution.

Q: Why does it hang when I click the .rdp file and does not prompt me to enter my username/password?

A: Make sure port 3389 is added to your inbound firewall rule.

Q: The B4ms configuration is unavailable due to high demand?

A: Try a different region.

Q: OMG! I can't start my VM, it says my VM is deallocated!

A: This can occur if the demand is high, come back and try in a few minutes, your stuff will still be there, as long as your VM is in your Virtual Machines list.

FAQs

Q: I am a 463/612 student, and my HTTP requests are not going through on the VM!

A: Add firewall inbound/outbound rule to allow all TCP traffic.

Q: DNS requests fail too often when I call gethostbyname()!

A: The default DNS server is not very good from Azure. Change it by performing the following:

1. On Azure, on your VM page, click the link after “Virtual network/subnet”.
2. Select “DNS servers” on the left panel.
3. Custom it to 8.8.8.8
4. May have to restart your VM.

Q: I have downloaded the .rdp file, how do I open it?

A: For Windows users, the client side already comes with the OS. If you are on OS X or other platforms, you need to download the client separately. (OS X: App Store, Microsoft Remote Desktop 10).

FAQs

Q: I managed to log in and I am trying to download the necessary software, but a window with message "Content from the website listed below is…" pops up with every page I open?

A: Open "Server Manager" -> "Local Server" -> "IE Enhanced Security Configuration", set it to Off.

That’s all for today!