

CLOUD COMPUTING
Lab 1
Introduction to Cloud Computing



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Lab Summary:

The main goal of the cloud computing lab is to experience the services provided by the cloud providers. In order to perform this lab, we chose the Microsoft Azure as our service provider as we have some basic knowledge to play around web services provided by the Amazon.

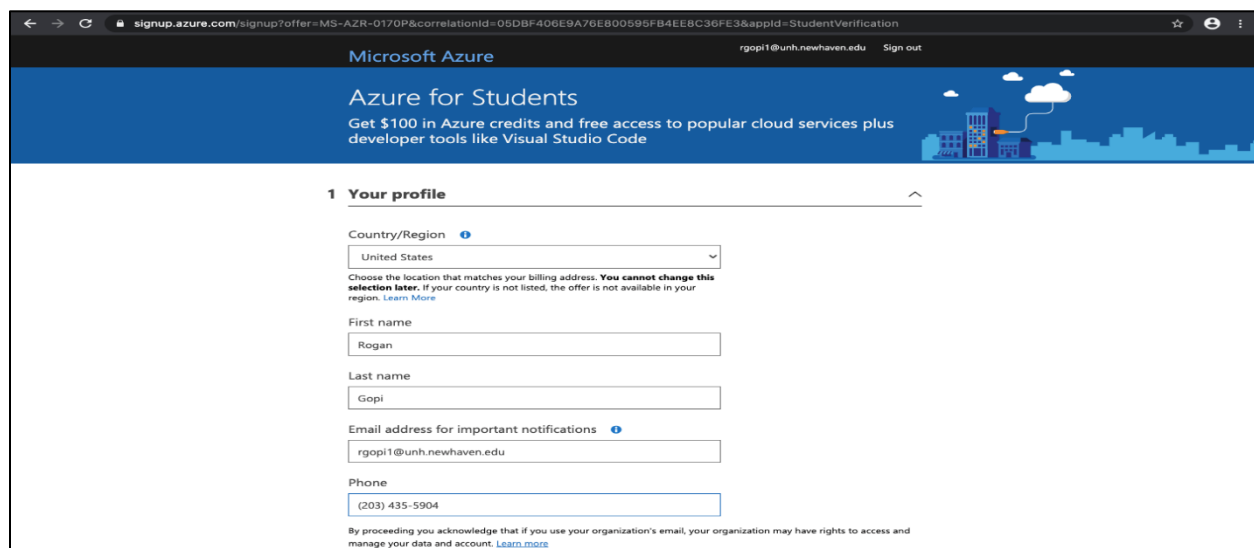
Initially, as per the lab instruction, a new account was created in the Microsoft Azure with one of our member's university ID (student account), Which directed us to the dashboard of Azure as the registration was completed.

Secondly, the task was to create a new virtual machine inside the Azure and how to interact with the resources provided such as storage, computing power, network and so on. Once the VM is created successfully, it should be configured such that you can login remotely from any computer with the perfect credentials.

Finally, a web application (web page) was created and deployed with lot of complicated steps to get familiar with the services provided by Azure and steps was explained clearly in the creation of web application [fig: screenshot]

Creation of Microsoft Azure:

A new account was created in the Microsoft Azure with student account (without validation of credit card). The student account lets the students to create their own account without credit card and \$100 credit was given to have interaction with the services.



The screenshot shows the 'Your profile' setup page on the Microsoft Azure website. The page has a blue header with the Microsoft Azure logo and a navigation bar. Below the header, there's a section titled 'Azure for Students' with a promotional message: 'Get \$100 in Azure credits and free access to popular cloud services plus developer tools like Visual Studio Code'. The main content area is titled '1 Your profile' and contains several input fields for user information. The 'Country/Region' dropdown is set to 'United States'. The 'First name' field contains 'Rogan' and the 'Last name' field contains 'Gopi'. The 'Email address for important notifications' field contains 'rgopi1@unh.newhaven.edu'. The 'Phone' field contains '(203) 435-5904'. At the bottom, there is a small disclaimer: 'By proceeding you acknowledge that if you use your organization's email, your organization may have rights to access and manage your data and account. [Learn more](#)'.

Microsoft Azure

rgopi1@unh.newhaven.edu Sign out

Azure for Students

Get \$100 in Azure credits and free access to popular cloud services plus developer tools like Visual Studio Code

1 Your profile

Country/Region ⓘ

United States

Choose the location that matches your billing address. **You cannot change this selection later.** If your country is not listed, the offer is not available in your region. [Learn More](#)

First name

Rogan

Last name

Gopi

Email address for important notifications ⓘ

rgopi1@unh.newhaven.edu

Phone

(203) 435-5904

By proceeding you acknowledge that if you use your organization's email, your organization may have rights to access and manage your data and account. [Learn more](#)

Creating Virtual Machine on Azure:

A Virtual Machine was created with student subscription account with the pre-built or inbuilt ISO of the particular Operating System, storage, network interface, authentication to login with azure and enabled ports to login with SSH. The complete details of the VM will be in the following screenshots.

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

Home > Virtual machines >

Create a virtual machine

⚠ Changing Basic options may reset selections you have made. Review all options prior to creating the virtual machine.

Basics Disks Networking Management Advanced Tags Review + create

Create a virtual machine that runs Linux or Windows. Select an image from Azure marketplace or use your own customized image. Complete the Basics tab then Review + create to provision a virtual machine with default parameters or review each tab for full customization. [Learn more](#)

Project details

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription * Azure for Students

Resource group * (New) Lab1_group [Create new](#)

Instance details

Virtual machine name * Lab1 ✓

Region * (US) East US

Availability options No infrastructure redundancy required

Image * Ubuntu Server 18.04 LTS - Gen1 [Browse all public and private images](#)

Azure Spot instance ☐ Yes ☒ No

Fig: 2. Creating VM on Azure

Creation of username and password for the virtual machine:-

Microsoft Azure

Search resources, services, and docs (G+)

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Home > Virtual machines >

Create a virtual machine

Changing Basic options may reset selections you have made. Review all options prior to creating the virtual machine.

Size *

Standard_B1ms - (\$15.11/month)

Select size

Administrator account

Authentication type

☐ SSH public key ☒ Password

Username *

Lab1

Password *

Confirm password *

Inbound port rules

Select which virtual machine network ports are accessible from the public internet. You can specify more limited or granular network access on the Networking tab.

Public inbound ports *

☐ None ☒ Allow selected ports

Select inbound ports *

SSH (22)

This will allow all IP addresses to access your virtual machine. This is only recommended for testing. Use the Advanced controls in the Networking tab to create rules to limit inbound traffic to known IP addresses.

Volume type selection

Microsoft Azure

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Home > 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

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

☐ Yes ☒ No

Ultra disk is available only for Availability Zones in eastus.

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

Network interface for the virtual machine

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

Home > Virtual machines >

Create a virtual machine

Define network connectivity for your virtual machine by configuring network interface card (NIC) settings. You can control ports, inbound and outbound connectivity with security group rules, or place behind an existing load balancing solution. [Learn more](#)

Network interface

When creating a virtual machine, a network interface will be created for you.

Virtual network * [Create new](#)

Subnet * [Create new](#)

Public IP [Create new](#)

NIC network security group ☐ None ☒ Basic ☐ Advanced

Public inbound ports * ☐ None ☒ Allow selected ports

Select inbound ports *

⚠ This will allow all IP addresses to access your virtual machine. This is only recommended for testing. Use the Advanced controls in the Networking tab to create rules to limit inbound traffic to known IP addresses.

Accelerated networking ☐ On ☒ Off

The selected VM size does not support accelerated networking.

Load balancing

[Review + create](#) < Previous Next : Management >

Security Center for the virtual machine

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

Home > Virtual machines >

Create a virtual machine

Azure Security Center

Azure Security Center provides unified security management and advanced threat protection across hybrid cloud workloads. [Learn more](#)

Enable basic plan for free ☒ Yes ☐ No

This will apply to every VM in the selected subscription

Monitoring

Boot diagnostics ☒ Enable with managed storage account (recommended)
☐ Enable with custom storage account
☐ Disable

OS guest diagnostics ☐ On ☒ Off

Identity

System assigned managed identity ☐ On ☒ Off

Azure Active Directory

Login with AAD credentials (Preview) ☐ On ☒ Off

⚠ This preview capability is not for production use. When you sign in, verify the name of the app on the sign-in screen is "Azure Linux VM sign in" and the IP address of the target VM is correct.

Auto-shutdown

Enable auto-shutdown ☐ On ☒ Off

Name tag for the virtual machine

The screenshot shows the 'Create a virtual machine' page in the Microsoft Azure portal, specifically the 'Tags' tab. The page has a blue header with the Microsoft Azure logo and a search bar. Below the header, there's a breadcrumb trail: 'Home > Virtual machines >'. The main title is 'Create a virtual machine'. Below the title, there are tabs for 'Basics', 'Disks', 'Networking', 'Management', 'Advanced', 'Tags', and 'Review + create'. The 'Tags' tab is currently selected. A note explains that tags are name/value pairs used for categorizing resources and consolidated billing. Below the note, there's a table with three columns: 'Name', 'Value', and 'Resource'. The first row shows 'Name' with a value of 'Lab1' and '12 selected' resources. The second row is empty, with a placeholder value and '12 selected' resources. At the bottom, there are buttons for 'Review + create', '< Previous', and 'Next: Review + create >'.

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

Home > Virtual machines >

Create a virtual machine

Basics Disks Networking Management Advanced **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	Resource
Name	Lab1	12 selected
		12 selected

Review + create < Previous Next: Review + create >

Reviewing the virtual machine details

The screenshot shows the 'Create a virtual machine' page in the Microsoft Azure portal, specifically the 'Review + create' tab. The page has a blue header with the Microsoft Azure logo and a search bar. Below the header, there's a breadcrumb trail: 'Home > Virtual machines >'. The main title is 'Create a virtual machine'. Below the title, there are tabs for 'Basics', 'Disks', 'Networking', 'Management', 'Advanced', 'Tags', and 'Review + create'. The 'Review + create' tab is currently selected. A green banner at the top indicates 'Validation passed'. Below the banner, there's a section for 'PRODUCT DETAILS' showing 'Standard B1ms by Microsoft' and 'Subscription credits apply' with a price of '0.0207 USD/hr'. There's also a 'TERMS' section with a warning icon and text about SSH port settings. At the bottom, there's a 'Basics' section showing 'Subscription: Azure for Students' and 'Resource group: (new) Lab1_group'. At the bottom, there are buttons for 'Create', '< Previous', 'Next >', and 'Download a template for automation'.

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

Home > Virtual machines >

Create a virtual machine

Basics Disks Networking Management Advanced Tags **Review + create**

Validation passed

PRODUCT DETAILS

Standard B1ms by Microsoft
[Terms of use](#) | [Privacy policy](#)

Subscription credits apply
0.0207 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 other 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: (new) Lab1_group

Create < Previous Next > [Download a template for automation](#)

Microsoft Azure

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

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Home > Virtual machines >

Create a virtual machine

✔ Validation passed

Basics

Subscription	Azure for Students
Resource group	(new) Lab1_group
Virtual machine name	Lab1
Region	East US
Availability options	No infrastructure redundancy required
Image	Ubuntu Server 18.04 LTS - Gen1
Size	Standard B1ms (1 vcpu, 2 GiB memory)
Authentication type	Password
Username	Lab1
Public inbound ports	SSH
Azure Spot	No

Disks

OS disk type	Standard HDD
Use managed disks	Yes
Use ephemeral OS disk	No

Networking

Virtual network	(new) Lab1_group-vnet
Subnet	(new) default (10.0.0.0/24)
Public IP	(new) Lab1-ip

Create< PreviousNext >Download a template for automation

Microsoft Azure

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

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Home > Virtual machines >

Create a virtual machine

✔ Validation passed

Management

Boot diagnostics	On
OS guest diagnostics	Off
Azure Security Center	Basic (free)
System assigned managed identity	Off
Auto-shutdown	Off
Backup	Disabled
Patch installation	OS-orchestrated patching: patches will be installed by OS

Advanced

Extensions	None
Cloud init	No
Proximity placement group	None

Tags

Name	Lab1 (Auto-shutdown schedule)
Name	Lab1 (Availability set)
Name	Lab1 (Disk)
Name	Lab1 (Network interface)
Name	Lab1 (Network security group)
Name	Lab1 (Public IP address)
Name	Lab1 (Recovery Services vault)

Create< PreviousNext >Download a template for automation

Deployment of virtual machine in Microsoft Azure

The screenshot shows the Microsoft Azure portal interface. At the top, the header includes the Microsoft Azure logo, a search bar, and the user's profile. The main content area is titled "CreateVm-Canonical.UbuntuServer-18.04-LTS-20200917194519 | Overview". Below the title, there's a navigation pane on the left with options like Overview, Inputs, Outputs, and Template. The main area displays "Deployment is in progress" with a status bar showing "We'd love your feedback! →". Below this, a table lists the deployment details, including the deployment name, subscription, resource group, start time, and correlation ID. A table below this lists the resources created during the deployment, such as Lab1, lab1865, Lab1-ip, Lab1_group-vnet, and Lab1-nsg, along with their types and statuses.

Deployment name: CreateVm-Canonical.UbuntuServer-18.04-LTS-... Start time: 9/17/2020, 7:51:32 PM
Subscription: Azure for Students Correlation ID: d4491fa8-bcf8-404a-8198-2444d1021c5d
Resource group: Lab1_group

Resource	Type	Status	Operation details
Lab1	Microsoft.Compute/virtualM...	Created	Operation details
lab1865	Microsoft.Network/network...	Created	Operation details
Lab1-ip	Microsoft.Network/publicA...	OK	Operation details
Lab1_group-vnet	Microsoft.Network/virtualNet...	OK	Operation details
Lab1-nsg	Microsoft.Network/networkS...	OK	Operation details

Virtual Machine in Azure

The screenshot shows the Microsoft Azure portal interface for a virtual machine named "Lab1". The left sidebar contains a list of virtual machines, with "Lab1" selected. The main area displays the "Overview" tab for "Lab1", showing its resource group, status, location, subscription, and tags. Below this, there's a table with properties such as Computer name, Operating system, SKU, Publisher, VM generation, Host, Proximity placement group, and Colocation status. To the right, there's a "Networking" section showing the public IP address, private IP address, and virtual network/subnet.

Virtual machine: Lab1

Resource group: LAB1_GROUP
Status: Creating
Location: East US
Subscription: Azure for Students
Subscription ID: 16d8131d-945f-4d5f-b083-be456219d512
Tags: Name: Lab1

Properties	Monitoring	Capabilities	Recommendations	Tutorials
Virtual machine				
Computer name	(not available)			
Operating system	Linux			
SKU	18.04-LTS			
Publisher	Canonical			
VM generation	V1			
Host	None			
Proximity placement group	N/A			
Colocation status	N/A			

Networking

Property	Value
Public IP address	52.150.11.10
Public IP address (IPv6)	-
Private IP address	10.0.0.4
Private IP address (IPv6)	-
Virtual network/subnet	Lab1_group-vnet/default
DNS name	Configure

Home > Virtual machines >

Virtual machines

University of New Haven

+ Add ▾ ⌚ Reservations ▾ ⋮

Try the new virtual machine resource browser! This experience is faster and has improved sorting and filtering capabilities. Please note that the new experience will not show classic virtual machines and does not include support for some columns such as maintenance status.

Filter by name...

☐ Name ↑↓

☒ Lab1 ⋮

Lab1

Virtual machine

Search (Cmd+⌘) ⌕

Connect ▶ Start ▶ Restart ▶ Stop ▶ Capture ▶ Delete ▶ Refresh ▶ Share to mobile

Overview

Operating system	Linux	Public IP address (IPv6)	-
SKU	18.04-LTS	Private IP address	10.0.0.4
Publisher	Canonical	Private IP address (IPv6)	-
VM generation	V1	Virtual network/subnet	Lab1_group-vnet/default
Host	None	DNS name	Configure
Proximity placement group	N/A		
Colocation status	N/A		

Settings

- Networking
- Connect
- Disks
- Size
- Security
- Advisor recommendations
- Extensions
- Continuous delivery
- Availability + scaling
- Configuration
- Identity
- Export template
- Properties
- Locks

Availability + scaling

Availability zone	N/A
-------------------	-----

Extensions

Extensions	N/A
------------	-----

Size

Size	Standard B1ms
vCPUs	1
RAM	2 GiB

Disk

OS disk	Lab1_OsDisk_1_55a23841d84841f3897c5e6ace5f7b25
Azure disk encryption	Not enabled
Ephemeral OS disk	N/A
Data disks	0

Azure Spot

Azure Spot	N/A
Azure Spot eviction policy	N/A

Logging into VM using SSH:

```
rogang@ROGANs-MacBook-Air ~ % ssh Lab1@52.150.11.10
The authenticity of host '52.150.11.10 (52.150.11.10)' can't be established.
ECDSA key fingerprint is SHA256:7ypzXSPlUKKSE6cn6YbAlj0BDbZZPvjKBSEMFQkVNHw.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '52.150.11.10' (ECDSA) to the list of known hosts.
Lab1@52.150.11.10's password:
Welcome to Ubuntu 18.04.5 LTS (GNU/Linux 5.4.0-1025-azure x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Thu Sep 17 23:54:37 UTC 2020

System load:  0.32           Processes:    118
Usage of /:   4.4% of 28.9GB Users logged in: 0
Memory usage: 14%           IP address for eth0: 10.0.0.4
Swap usage:   0%

0 packages can be updated.
0 updates are security updates.

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.

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

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

Lab1@Lab1:~$
```

Creation of Web Application:

Microsoft Azure

Search resources, services, and docs (G+)

rgopi1@unh.newhaven...
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Home > App Services >

Create Web App

BasicsMonitoringTagsReview + create

Summary

Web App

by Microsoft

Details

Subscription

16d8131d-945f-4d5f-b083-be456219d512

Resource Group

Lab1_group

Name

GroupR2G

Publish

Code

Runtime stack

.NET Core 3.1 (LTS)

App Service Plan (New)

Name

GroupR2G

Operating System

Linux

Region

East US

SKU

Free

ACU

Shared infrastructure

Memory

1 GB memory

Monitoring

Application Insights

Not enabled

Create< PreviousNext >Download a template for automation

Home > rogan

rogan
App Service

Search (Cmd+)

BrowseStopSwapRestartDeleteGet publish profileReset publish profileSend your feedback

.NET Framework 4.8 is coming to App Service starting in late July 2020 and will complete around late September 2020. Click to learn more and see progress on the deployment. →

Essentials

Resource group (change)

rgopi1_rg_Windows_eastus

URL

https://rogan.azurewebsites.net

Status

Running

App Service Plan

rgopi1_asp_Windows_eastus_0 (F1: Free)

Location

East US

FTP/deployment username

No FTP/deployment user set

Subscription (change)

Azure for Students

FTP hostname

ftp://waws-prod-blu-157.ftp.azurewebsites.windows.net/site...

Subscription ID

16d8131d-945f-4d5f-b083-be456219d512

FTPS hostname

ftps://waws-prod-blu-157.ftp.azurewebsites.windows.net/sit...

Tags (change)

Click here to add tags

Diagnose and solve problems
Our self-service diagnostic and troubleshooting experience helps you identify and resolve issues with your web app.

Application Insights
Application Insights helps you detect and diagnose quality issues in your apps, and helps you understand what your users actually do with it.

App Service Advisor
App Service Advisor provides insights for improving app experience on the App Service platform. Recommendations are sorted by freshness, priority and impact to your app.

Deployment

Quickstart

Deployment slots

Deployment Center

Settings

Configuration

Authentication / Authorization

Application Insights

Identity

Backups

Custom domains

TLS/SSL settings

Networking

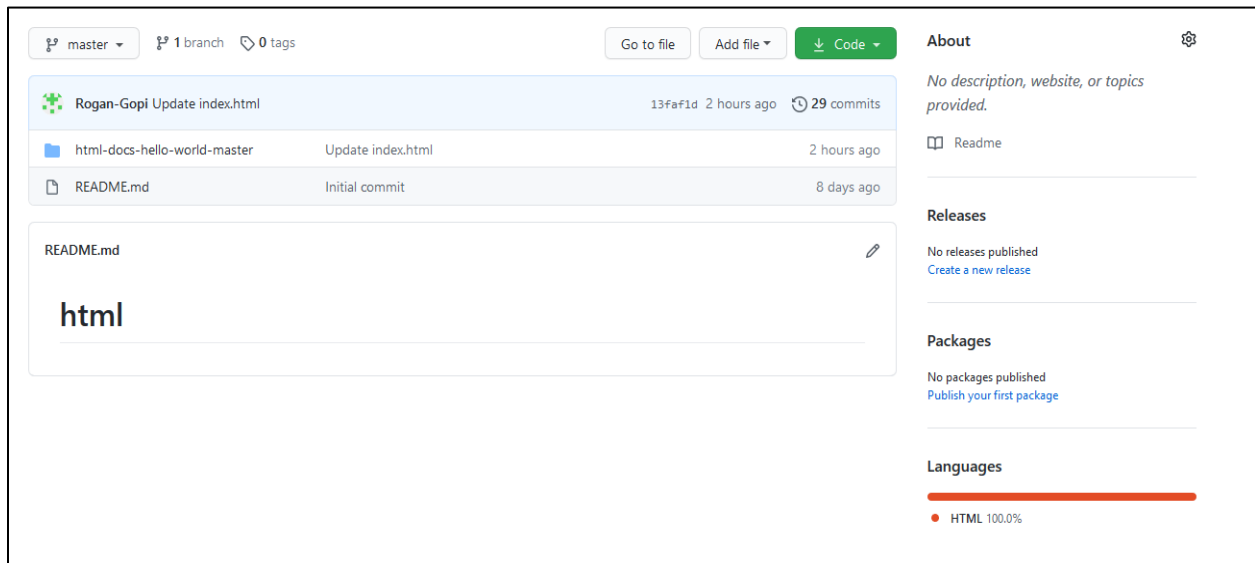
Http 5xx

Data In

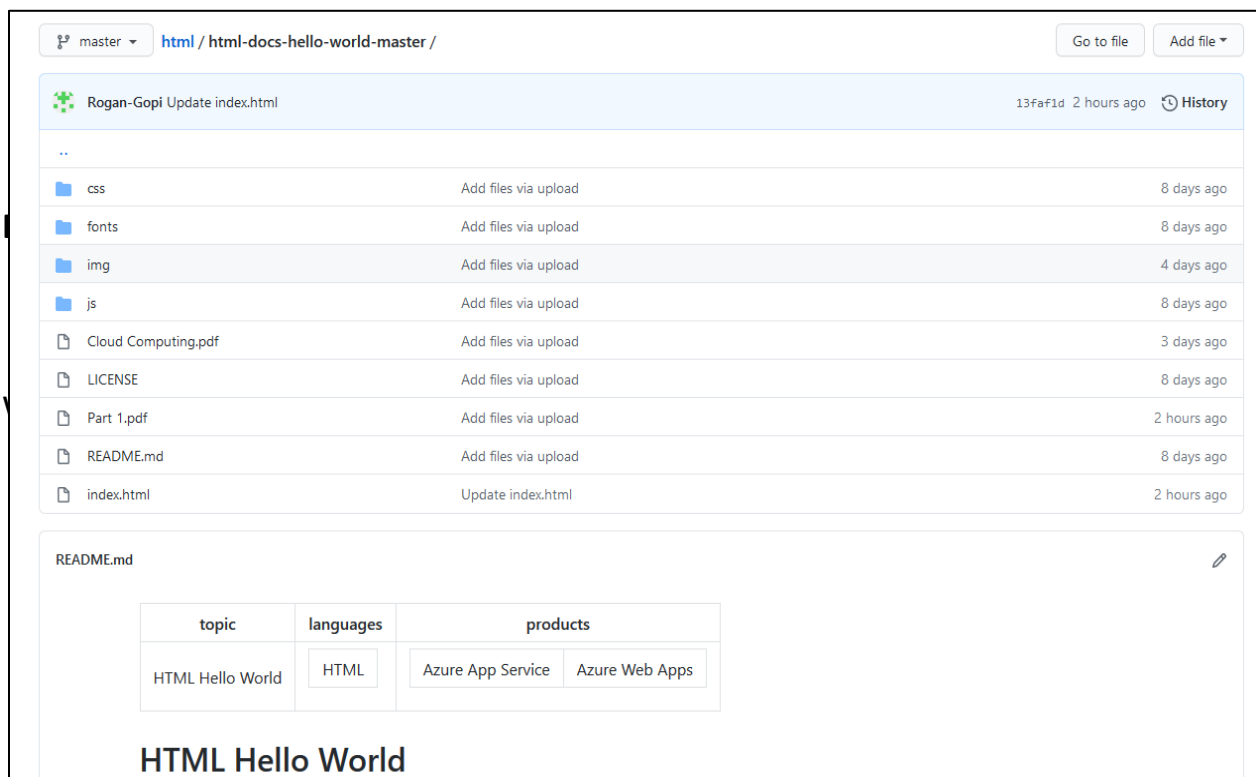
Data Out

To perform such a web page we first created the git hub repository named HTML, added the required html files and cloned into Azure terminal and deployed it which successfully launched the static website

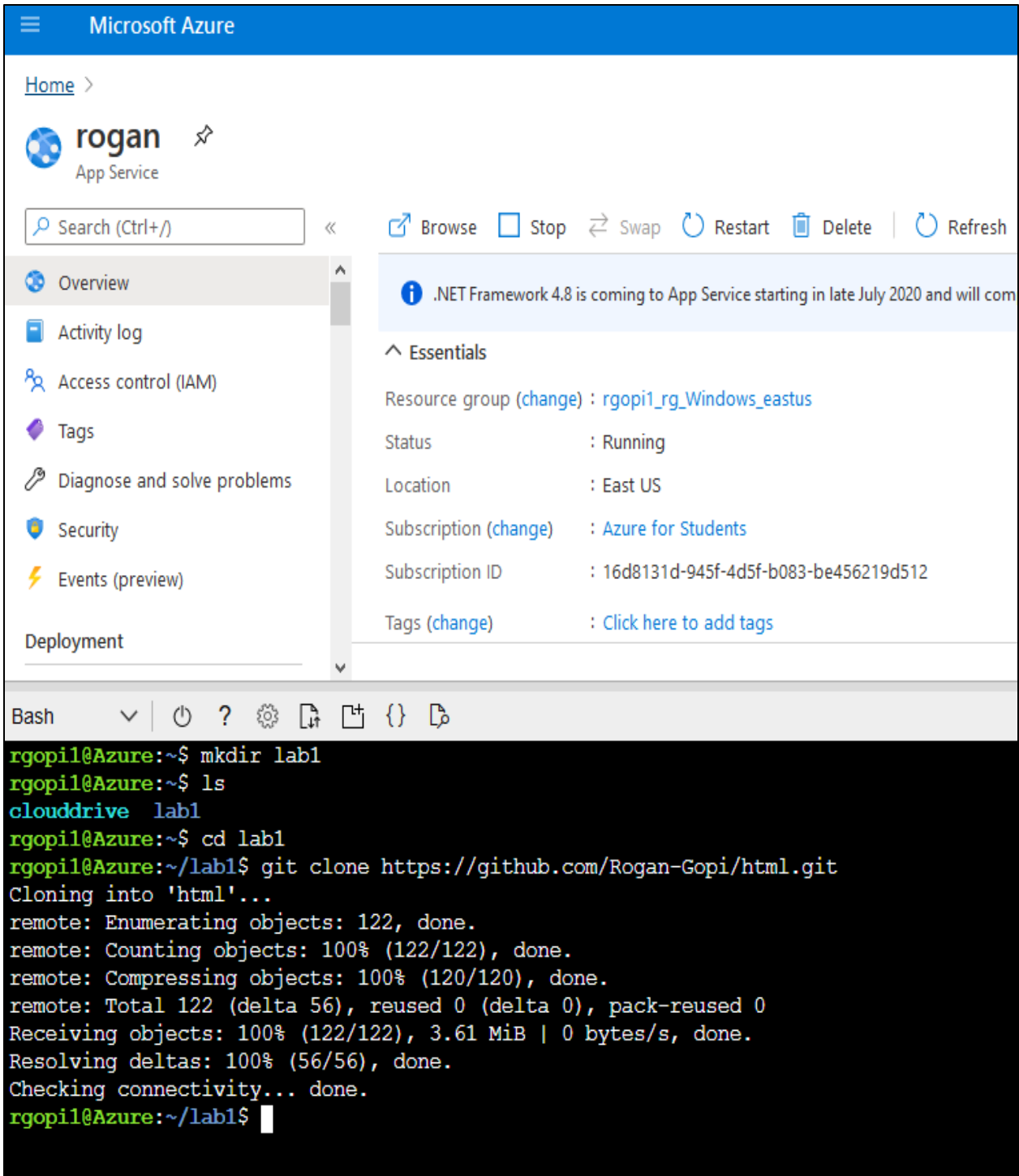
Git Account



Git cloning through shell



Git cloning



Microsoft Azure

Home >

rogan
App Service

Search (Ctrl+/) << Browse Stop Swap Restart Delete Refresh

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Security

Events (preview)

Deployment

.NET Framework 4.8 is coming to App Service starting in late July 2020 and will com

Essentials

Resource group (change) : [rgopi1_rg_Windows_eastus](#)

Status : Running

Location : East US

Subscription (change) : [Azure for Students](#)

Subscription ID : 16d8131d-945f-4d5f-b083-be456219d512

Tags (change) : [Click here to add tags](#)

Bash

```
rgopil@Azure:~$ mkdir lab1
rgopil@Azure:~$ ls
clouddrive lab1
rgopil@Azure:~$ cd lab1
rgopil@Azure:~/lab1$ git clone https://github.com/Rogan-Gopi/html.git
Cloning into 'html'...
remote: Enumerating objects: 122, done.
remote: Counting objects: 100% (122/122), done.
remote: Compressing objects: 100% (120/120), done.
remote: Total 122 (delta 56), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (122/122), 3.61 MiB | 0 bytes/s, done.
Resolving deltas: 100% (56/56), done.
Checking connectivity... done.
rgopil@Azure:~/lab1$
```

Deploying the web application via shell

The screenshot displays the Microsoft Azure portal interface. At the top, the header shows 'Microsoft Azure' and a search bar. Below the header, the user's profile 'rogan' is visible, along with a search bar and a set of action buttons: 'Browse', 'Stop', 'Swap', 'Restart', 'Delete', 'Refresh', 'Get publish profile', and 'Reset'.

The left sidebar contains a navigation menu with the following items: 'Overview', 'Activity log', 'Access control (IAM)', 'Tags', 'Diagnose and solve problems', 'Security', 'Events (preview)', and 'Deployment'. The 'Overview' tab is currently selected.

The main content area shows the 'Essentials' section for the 'rogan' App Service. It includes a notification about '.NET Framework 4.8 is coming to App Service starting in late July 2020 and will complete around late September 2020. Click to learn more.' Below this, the 'Essentials' section displays the following details:

- Resource group (change): [rgopi1_rg_Windows_eastus](#)
- Status: Running
- Location: East US
- Subscription (change): [Azure for Students](#)
- Subscription ID: 16d8131d-945f-4d5f-b083-be456219d512
- Tags (change): [Click here to add tags](#)

At the bottom of the portal, a Bash terminal window is open, showing the following commands and output:

```
Bash
Receiving objects: 100% (122/122), 3.61 MiB | 0 bytes/s, done.
Resolving deltas: 100% (56/56), done.
Checking connectivity... done.
rgopi1@Azure:~/lab1$ cd html
rgopi1@Azure:~/lab1/html$ cd html-docs-hello-world-master/
rgopi1@Azure:~/lab1/html/html-docs-hello-world-master$ az webapp up --location eastus --name rogan --html
Webapp 'rogan' already exists. The command will deploy contents to the existing app.
Creating zip with contents of dir /home/rgopi1/lab1/html/html-docs-hello-world-master ...
Getting scm site credentials for zip deployment
Starting zip deployment. This operation can take a while to complete ...
Deployment endpoint responded with status code 202
You can launch the app at http://rogan.azurewebsites.net
{
  "URL": "http://rogan.azurewebsites.net",
  "appserviceplan": "rgopi1_asp_Windows_eastus_0",
  "location": "eastus",
  "name": "rogan",
  "os": "Windows",
  "resourcegroup": "rgopi1_rg_Windows_eastus",
  "runtime_version": "-",
  "runtime_version_detected": "-",
  "sku": "FREE",
  "src_path": "//home//rgopi1//lab1//html//html-docs-hello-world-master"
}
rgopi1@Azure:~/lab1/html/html-docs-hello-world-master$
```

Static website deployed in azure

Web URL : <https://rogan.azurewebsites.net/>

Cloud Computing Lab 1



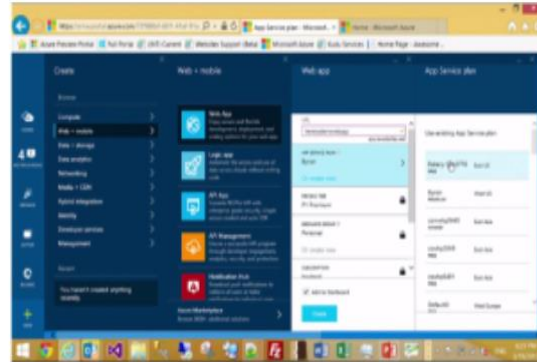
Group Members

Rogan Gopi, Master's in Cybersecurity and Networks
Gokul SD, Master's in Cybersecurity and Networks
Raviteja Polavarapu, Master's in Computer Science

Lab 1 Report

Open a PDF File [Part 1](#).

Open a PDF File [Part 2](#).



Azure Static Website(CDN)

We created a static website using microsoft azure app service

Problems and Solution:

The SSH let us only to view the command line whereas not the graphical representation of OS so we tried installing VNC and then we noted the local host which it was tunneling through and configure that port in the Azure to make sure it works good and finally, it allowed us to view the VNC graphical representation of OS.