

LAB EXPERIMENTS

CSA1517

**CLOUD COMPUTING AND BIG
DATA ANALYTICS FOR HADOOP
APPLICATIONS**

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EXP18: DEMONSTRATE INFRASTRUCTURE AS A SERVICE (IAAS) BY CREATING A VIRTUAL MACHINE USING A PUBLIC CLOUD SERVICE PROVIDER (AZURE), CONFIGURE WITH REQUIRED MEMORY AND CPU.

AIM:

To demonstrate infrastructure as a service (iaas) by creating a virtual machine using a public cloud service provider (azure), configure with required memory and cpu.

PROCEDURE:

STEP1: CREATE AN ACCOUNT IN MICROSOFT AZURE.

STEP2: GOTO RESOURCE GROUPAND CREATE A RESOURCE GROUP.

STEP3: GIVE NECESSARY THINGS FOR RESOURCE GROUP.

STEP4: CREATE AVIRTUAL NETWORK FOR TO CREATE AVIRTUALMACHINE .

STEP5: NOW CREATE A VIRTUAL MACHINE WITH UR IPADDRESS ANUSERNAME AND PASSWORD FOR YOUR VIRTUAL MACINE.

STEP6: AND YOUR VIRTUAL MACHINE IS DEPLOYED.

STEP7: NOW CONNECT THE VIRTUAL MACHINE AND DOWNLOAD THE RDP FILETO OPEN YOUR

WINDOWS VIRTUAL MACHINE.

STEP8: NOW RESIZE THE VIRTUAL MACHINE SIZE.

STEP9: CREATED ANEW WINDOWS VIRTUAL MACHINE

IMPLEMENTATION:

The screenshot shows the Azure portal interface for creating a new resource group. The left sidebar shows 'Resource groups' with two existing groups: 'DefaultResourceGroup-CAU' and 'NetworkWatcherRG'. The main area is titled 'Create a resource group' with a green validation message 'Validation passed.' A 'Review + create' button is highlighted. The 'Basics' tab is selected, displaying subscription details: 'Subscription' (Azure for Students), 'Resource group' (Record), and 'Region' (East US). The 'Tags' section shows 'None'. At the bottom, there are navigation buttons for 'Page 1 of 1', 'Create', 'Previous', 'Next >', and a link to 'Download a template for automation'.

Create a resource group

Basics Tags Review + create

Resource group - A container that holds related resources for an Azure solution. The resource group can include all the resources for the solution, or only those resources that you want to manage as a group. You decide how you want to allocate resources to resource groups based on what makes the most sense for your organization. Learn more [\[?\]](#)

Project details

Subscription *	Azure for Students
Resource group *	Record

Resource details

Region *	(US) East US
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Page 1 of 1 Review + create < Previous Next : Tags >

Resource groups

Default Directory

+ Create Manage view Refresh Export to CSV Open query Assign tags Feedback

Filter for any field... Subscription == all Location == all Add filter

No grouping List view

Showing 1 to 3 of 3 records.

Name	Subscription	Location
DefaultResourceGroup-CAU	Azure for Students	Australia Central
NetworkWatcherRG	Azure for Students	East US
Record	Azure for Students	East US

CreateVm-MicrosoftWindowsServer.WindowsServer-201-20210721104828 | Overview

Deployment

Search (Ctrl+F)

Delete Cancel Redeploy Refresh

We'd love your feedback! [\[?\]](#)

Your deployment is complete

Deployment name: CreateVm-MicrosoftWindowsServer.WindowsSe... Start time: 7/21/2021, 10:52:14 AM
Subscription: Azure for Students Correlation ID: a0f40b35-8270-49dc-bd7-42ee66e5c61

Deployment details (Download)

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

Security Center
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Home > CreateVm-MicrosoftWindowsServer.WindowsServer-201-20210721104826 > Record-virtual

Record-virtual

Virtual machine

Search (Ctrl+F)

Connect Start Restart Stop Capture Delete Refresh Open in mobile

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Settings

Networking

Connect

Windows Admin Center (preview)

Disks

Size

Security

Advisor recommendations

Extensions

https://www.azure.com

Essentials

Resource group (change) : Record

Status : Running

Location : East US

Subscription (change) : Azure for Students

Subscription ID : db4eeedb-1e3d-1be0-9c9c-65cc8d390405

Tags (change) : Click here to add tags

Operating system : Windows (Windows Server 2019 Datacenter)

Size : Standard DS1 v2 (1 vcpu, 3.5 GB memory)

Public IP address : 23.96.9.147

Virtual network/subnet : Record-vnet/default

DNS name : Not configured

Properties

Virtual machine

Computer name : Record-virtual

Operating system : Windows (Windows Server 2019 Datacenter)

Publisher : MicrosoftWindowsServer

Offer : WindowsServer

Plan : 2019-Datascenter

VM generation : V1

Agent status : Ready

Networking

Public IP address : 23.96.9.147

Public IP address (IPv6) : -

Private IP address : 10.0.0.4

Private IP address (IPv6) : -

Virtual network/subnet : Record-vnet/default

DNS name : Configure

JSON View

RESULT:

Infrastructure as a service (iaas) by creating a virtual machine using a public cloud service provider (azure), configure with required memory and cpu has been demonstrated.