



Vidyavardhini's College of Engineering & Technology  
Department of Computer Science and Engineering (Data Science)

**Course:** SBL: Cloud Computing

**Course code:** CSL605

**Year:** TE **SEM:** VI

**Experiment No. 02**

AIM:- To study and Implement Infrastructure as a Service using AWS EC2 by creating a Windows Virtual Machine through RDP protocol and change volume of attached storage.

Name:

Roll Number:

Date of Performance:

Date of Submission:

**Evaluation**

| Performance Indicator               | Max. Marks | Marks Obtained |
|-------------------------------------|------------|----------------|
| Performance                         | 5          |                |
| Understanding                       | 5          |                |
| Journal work and timely submission. | 10         |                |
| <b>Total</b>                        | <b>20</b>  |                |

| Performance Indicator               | Exceed Expectations (EE) | Meet Expectations (ME) | Below Expectations (BE) |
|-------------------------------------|--------------------------|------------------------|-------------------------|
| Performance                         | 5                        | 3                      | 2                       |
| Understanding                       | 5                        | 3                      | 2                       |
| Journal work and timely submission. | 10                       | 8                      | 4                       |

**Checked by**

**Name of Faculty** : Ichhanshu Jaiswal

**Signature** :

**Date** :



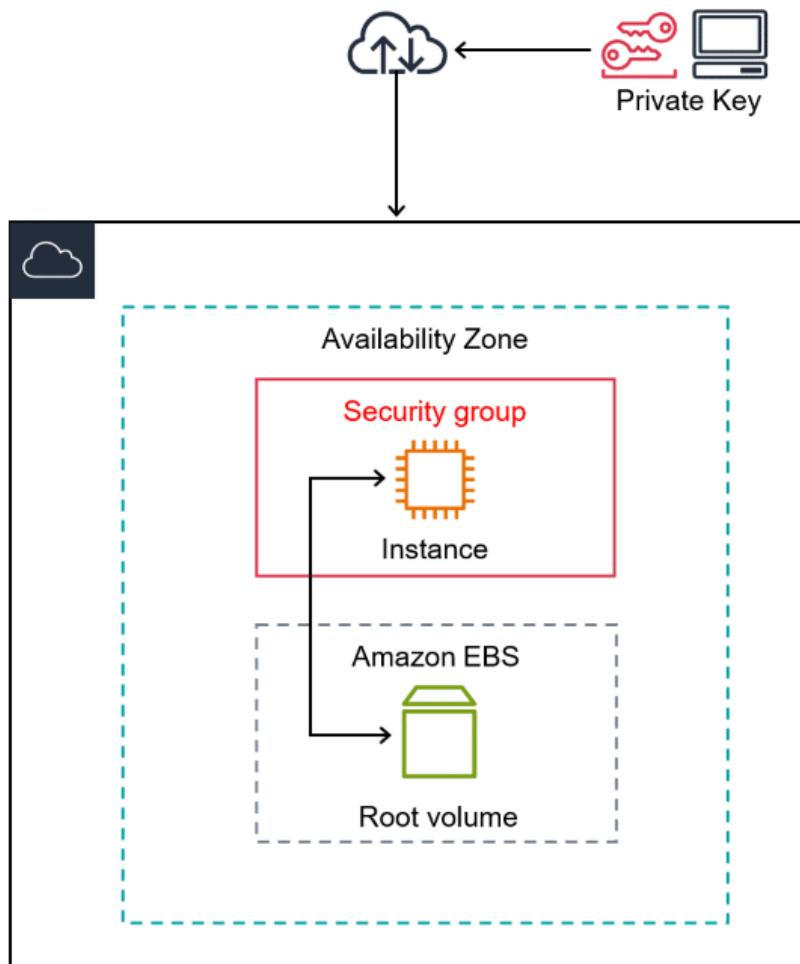
## Experiment No. 2

**Aim:** To study and Implement Infrastructure as a Service using AWS EC2 by creating a Windows Virtual Machine through RDP protocol and change volume of attached storage.

### Theory:

An *instance* is a virtual server in the AWS Cloud. With Amazon EC2, you can set up and configure the operating system and applications that run on your instance.

When you launch your instance, you secure it by specifying a key pair (to prove your identity) and a security group (which acts as a virtual firewall to control ingoing and outgoing traffic). When you connect to your instance, you must provide the private key of the key pair that you specified when you launched your instance.





# Vidyavardhini's College of Engineering & Technology

## Department of Computer Science and Engineering (Data Science)

### Snapshots of implementation:

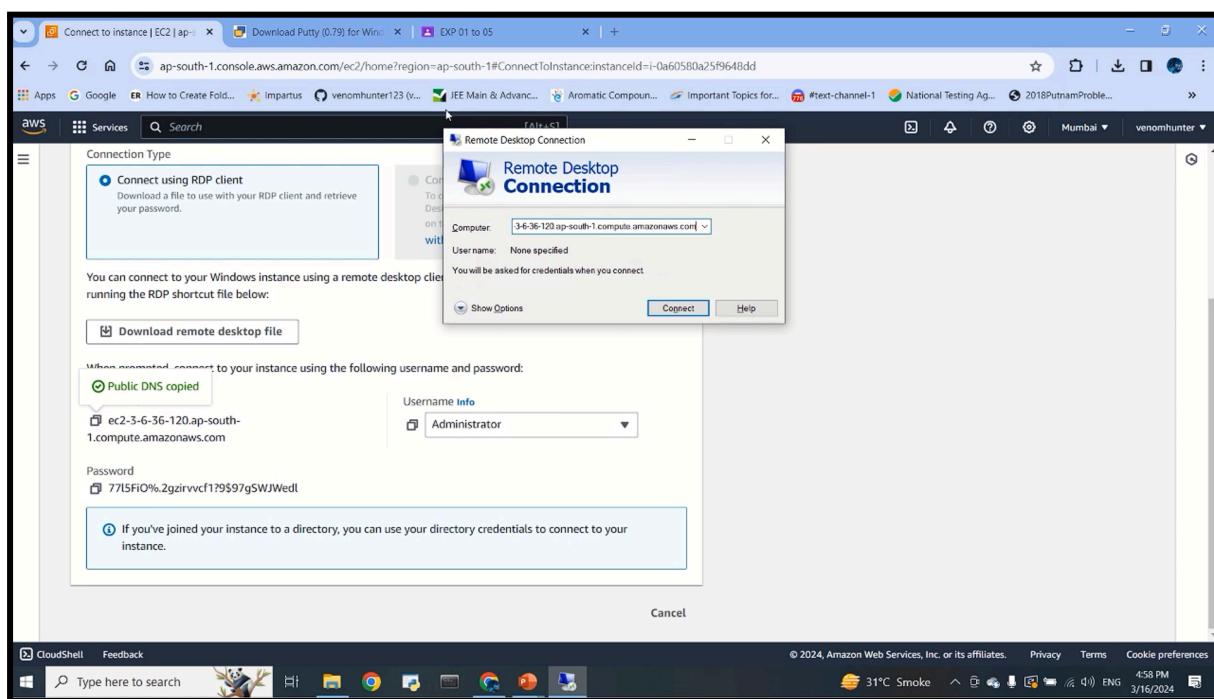
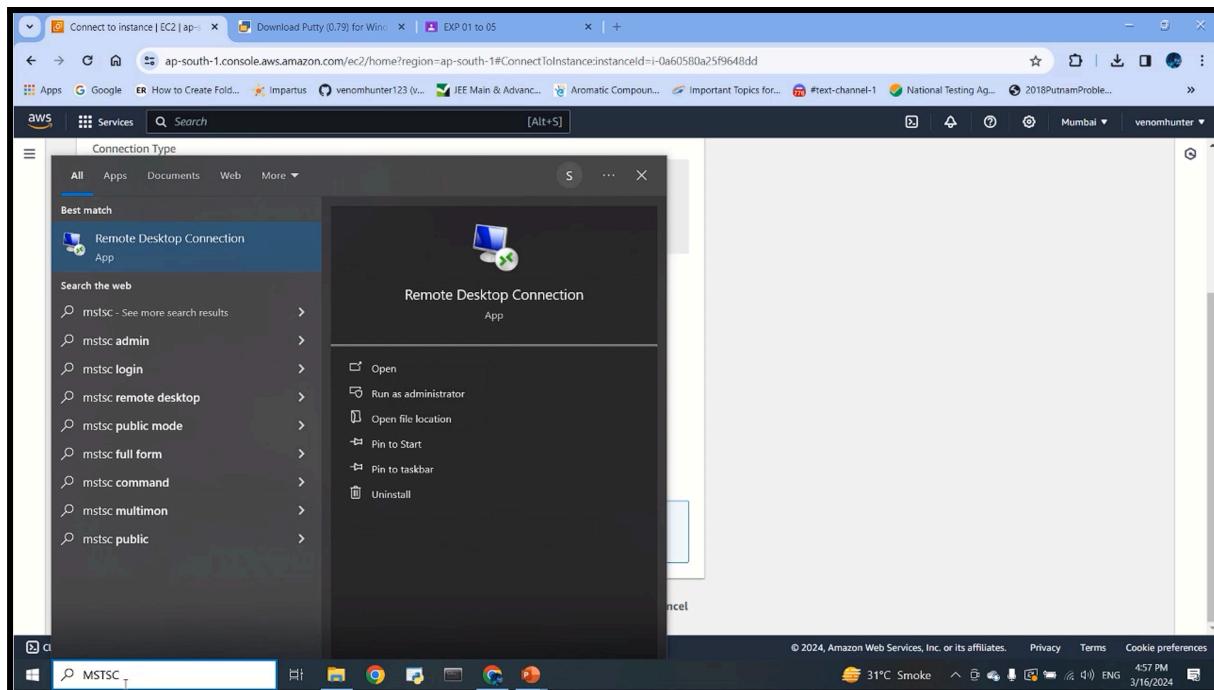
The screenshot shows the 'Launch an instance' wizard in the AWS Management Console. The 'Name and tags' section has 'my-windows-' entered in the Name field. The 'Application and OS Images (Amazon Machine Image)' section shows 'Amazon Linux 2023 AMI 2023.3.2...' selected. The 'Virtual server type (instance type)' is set to 't2.micro'. Under 'Storage (volumes)', it shows '1 volume(s) - 8 GiB'. A tooltip for the 'Free tier' is visible, stating: 'In your first year includes 750 hours of t2.micro or t3.micro in the Regions in which you launch instances'. The 'Launch instance' button is highlighted.

The screenshot shows the 'Instances (1/5)' page in the AWS Management Console. The left sidebar is expanded to show 'Instances' under 'EC2' and includes options like 'Instance Types', 'Launch Templates', and 'Capacity Reservations'. The main table lists three instances: 'sairaj' (terminated), 'my-windows' (running), and 'sairaj' (stopped). The 'my-windows' instance is selected. The 'Details' tab is active, displaying instance summary information such as Public IPv4 address (3.6.36.120), Instance state (Running), and Private IP DNS name (ip-172-31-40-224.ap-south-1.compute.internal).



# Vidyavardhini's College of Engineering & Technology

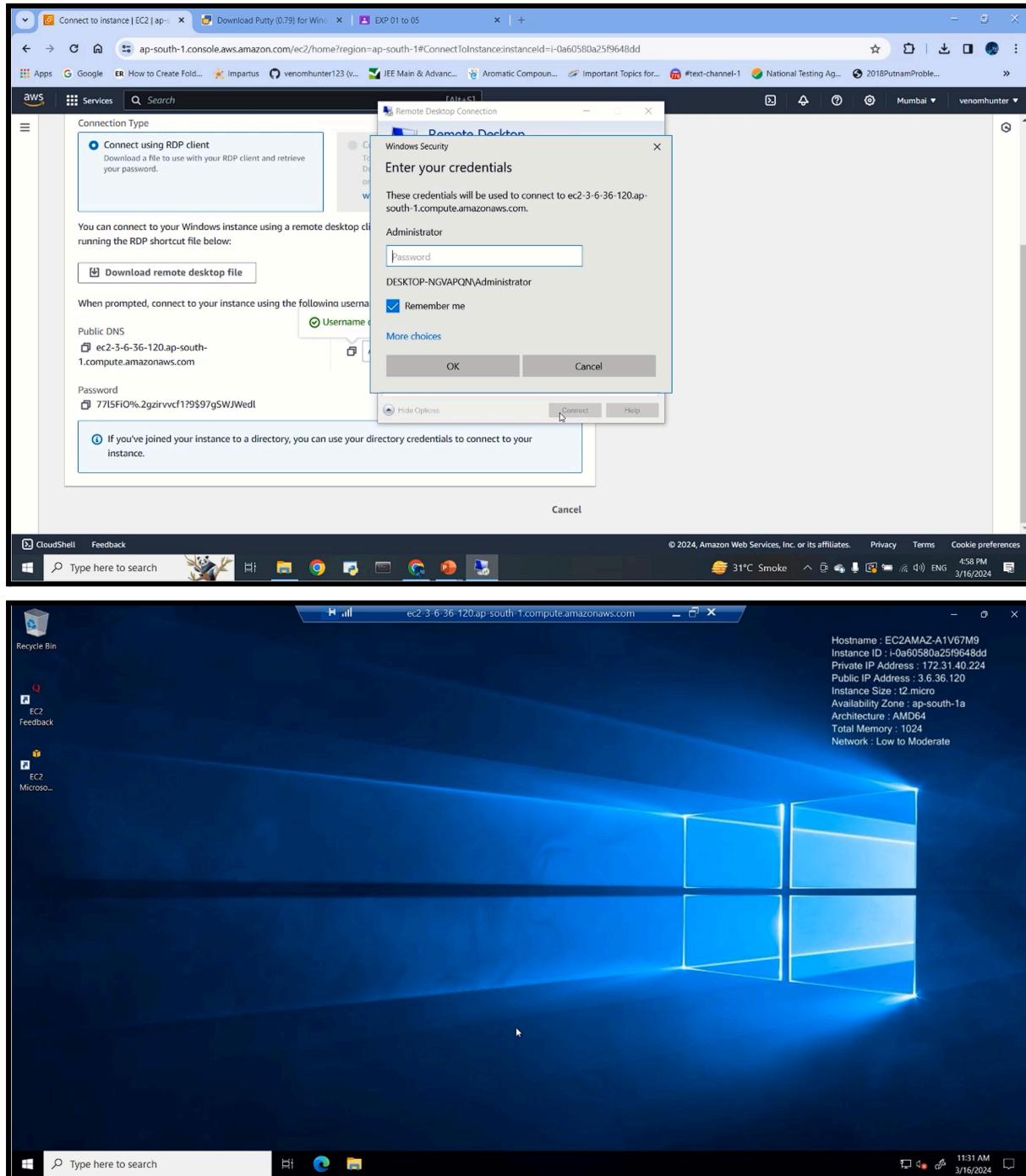
## Department of Computer Science and Engineering (Data Science)





# Vidyavardhini's College of Engineering & Technology

## Department of Computer Science and Engineering (Data Science)



Video Link: [Dhanashree\\_Thakur\\_56\\_Exp2.mp4](#)

CSL605:SBL CC Lab



### **Conclusion:**

Comment on the use of RDP protocol for Windows Virtual machine

**Ans:** Remote Desktop Protocol (RDP) is a widely used protocol for accessing and managing Windows-based virtual machines (VMs) hosted on platforms like Amazon EC2, Microsoft Azure, or other cloud providers. Here are some key points about the use of RDP with Windows VMs:

**Remote Access:** RDP allows users to remotely access and control a Windows VM from another computer or device. This capability is invaluable for system administrators, developers, and users who need to manage Windows-based systems located in remote data centers or cloud environments.

**Graphical User Interface (GUI) Access:** RDP provides full access to the Windows graphical user interface, enabling users to interact with the desktop environment, run applications, and perform administrative tasks as if they were physically present at the VM.

**Secure Communication:** RDP encrypts data transmitted between the client and the Windows VM, ensuring that sensitive information remains secure during remote sessions. Additionally, RDP supports various authentication methods, including password-based authentication and network-level authentication (NLA), enhancing security.

**Multi-User Support:** Windows Server editions support concurrent RDP sessions, allowing multiple users to connect to a single VM simultaneously. This capability is useful for scenarios such as remote desktop services (RDS) deployments, where multiple users need access to shared resources and applications.

**Clipboard and File Transfer:** RDP facilitates clipboard and file transfer between the client and the remote Windows VM, enabling seamless data exchange. Users can copy and paste text, images, and files between their local machine and the remote desktop session.