

MIS 6363 – Lab 3 (Lab3.AWSSStorages)

Rahul Kotian (RMK061000)

Questions

1. During the creation of EC2 Storage step when you select EBS volume type what are the available devices (how many and name of them) also explain what is the meaning of /dev/sdb etc ?

Available Devices :

Names: **/dev/sd[b-z]** (i.e. /dev/sdb, /dev/sdc, /dev/sdd,, /dev/sdz)

Volume 2 (Custom) Remove

Storage type [Info](#)
EBS

Size (GiB) [Info](#)
8

Delete on termination [Info](#)
No

Throughput [Info](#)
125

Device name - required	Info	Snapshot	Info
/dev/sdb		Select	
/dev/sdb	Linux ✓		
/dev/sdc	Linux		
/dev/sdd	Linux		
/dev/sde	Linux		
/dev/sdf	Linux		
/dev/sdg	Linux		
/dev/sdh	Linux		
/dev/sdi	Linux		

are only applicable when
is set on this volume.

Based on the Operating system, the Available device names are as follows:

- **Linux instances:**

Two types of virtualization are available for Linux instances: paravirtual (PV) and hardware virtual machine (HVM). The virtualization type of an instance is determined by the AMI used to launch the instance. All instance types support HVM AMIs.

Virtualization type	Available Device Names
Paravirtual	<div>/dev/sd[a-z]</div> <div>/dev/sd[a-z][1-15]</div> <div>/dev/hd[a-z]</div> <div>/dev/hd[a-z][1-15]</div>
HVM	<div>/dev/sd[a-z]</div>

	<code>/dev/xvd[a-d][a-z]</code> <code>/dev/xvd[e-z]</code>
--	---

Windows Instances:

Windows AMIs use one of the following sets of drivers to permit access to virtualized hardware: AWS PV, Citrix PV, and RedHat PV.

The following table lists the available device names that you can specify in a block device mapping or when attaching an EBS volume.

Driver type	Available Device Names
AWS PV, Citrix PV	<code>xvd[b-z]</code>

Driver type	Available Device Names
	xvd[b-c][a-z] /dev/sda1 /dev/sd[b-e]
Red Hat PV	xvd[a-z] xvd[b-c][a-z] /dev/sda1 /dev/sd[b-e]

Reference: https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/device_naming.html?icmpid=docs_ec2_console

2. Please provide EFS volume screenshot

The screenshot displays the AWS Elastic File System (EFS) console. The top navigation bar includes the AWS logo, a search bar, and service icons for S3, RDS, EC2, VPC, and EFS. The left sidebar shows the 'Elastic File System' section with links to 'File systems' and 'Access points', as well as 'AWS Backup', 'AWS DataSync', 'AWS Transfer', and 'Documentation'. The main content area shows the details for a file system named 'myefsdisk (fs-00724233ecabd006a)'. The 'General' tab is selected, showing the following information:

- Performance mode:** General Purpose
- Throughput mode:** Elastic
- Lifecycle management:** Transition into Infrequent Access (IA): 30 day(s) since last access; Transition into Archive: 90 day(s) since last access; Transition into Standard: None
- Availability zone:** Regional
- Automatic backups:** Enabled
- Encrypted:** 6f4d0452-235c-41c3-8511-4da777a8eadb (aws/elasticfilesystem)
- File system state:** Available
- DNS name:** fs-00724233ecabd006a.efs.us-east-1.amazonaws.com
- Replication overwrite protection:** Enabled

Below the 'General' tab, there are tabs for 'Metered size', 'Monitoring', 'Tags', 'File system policy', 'Access points', 'Network', and 'Replication'. The 'Metered size' tab is selected, showing the following information:

- Total size:** 6.00 KiB
- Size in Standard:** 6.00 KiB (100%)
- Size in IA:** 0 Bytes (0%)
- Size in Archive:** 0 Bytes (0%)

A donut chart visualizes the size distribution, showing 100% in Standard storage. A legend at the bottom indicates: Size in Standard (blue), Size in IA (red), and Size in Archive (green).

3. Make your bucket public and insert one of the your favorite pet's (or any other) funny picture in there and send me the your bucket address so I can check.

<https://myawsbucket-summer24.s3.amazonaws.com/cocomelon.jpg>

<https://myawsbucket-summer24.s3.amazonaws.com/cocomelon.jpg>



aws

Services

Search

[Alt+S]

S3

RDS

EC2

VPC

EFS

N. Virginia

Rahul-RMK061000

Amazon S3

Buckets

Access Grants

Access Points

Object Lambda Access Points

Multi-Region Access Points

Batch Operations

IAM Access Analyzer for S3

Block Public Access settings for this account

Storage Lens

Dashboards

Storage Lens groups

AWS Organizations settings

Feature spotlight 7

Amazon S3

Buckets

myawsbucket-summer24

myawsbucket-summer24

Objects

Properties

Permissions

Metrics

Management

Access Points

Objects (1)

Info

Copy S3 URI

Copy URL

Download

Open

Delete

Actions

Create folder


Upload

Objects are the fundamental entities stored in Amazon S3. You can use [Amazon S3 Inventory](#) to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

Find objects by prefix

Show versions

< 1 >

	Name	Type	Last modified	Size	Storage class
	 cocomelon.jpg	jpg	June 22, 2024, 15:42:28 (UTC-05:00)	57.1 KB	Standard

Appendix:

Connecting to Windows Machine

The screenshot displays the AWS Management Console interface. At the top, the navigation bar includes the AWS logo, a 'Services' menu, a search bar, and a keyboard shortcut '[Alt+S]'. On the right side of the navigation bar, there are icons for help, notifications, and settings, along with the text 'Ohio' and a user profile 'Rahul-RMK061000'.

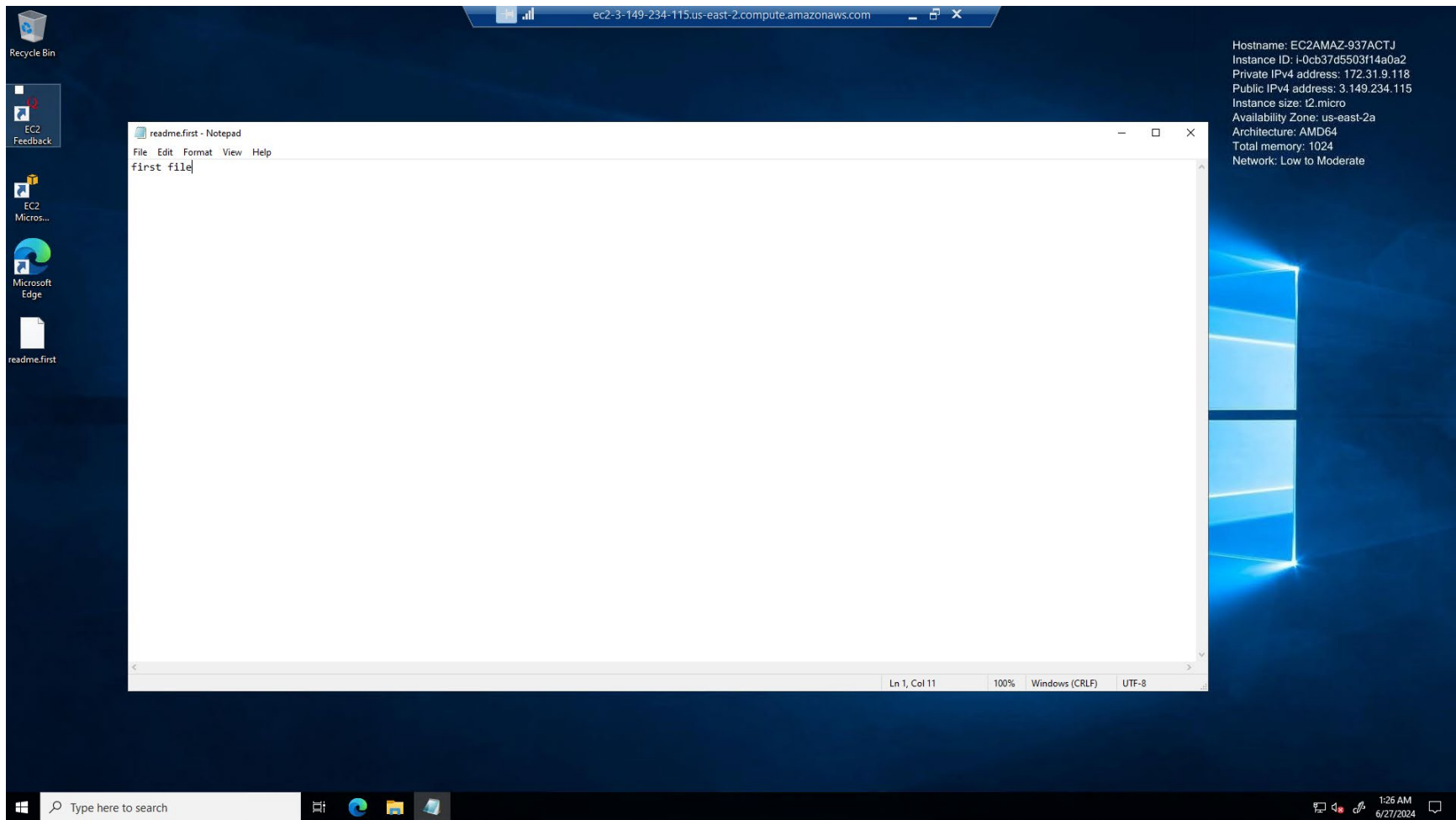
The main content area shows the breadcrumb path: [EC2](#) > [Instances](#) > [i-0cb37d5503f14a0a2](#) > [Connect to instance](#). The title 'Connect to instance' is followed by an 'Info' link. Below the title, a message states: 'Connect to your instance i-0cb37d5503f14a0a2 (myWindows3) using any of these options'.

There are three tabs: 'Session Manager', 'RDP client' (which is selected), and 'EC2 serial console'. Under the 'RDP client' tab, the 'Instance ID' is listed as 'i-0cb37d5503f14a0a2 (myWindows3)'. The 'Connection Type' section has two options: 'Connect using RDP client' (selected) and 'Connect using Fleet Manager'. The 'Connect using RDP client' option includes a description: 'Download a file to use with your RDP client and retrieve your password.' The 'Connect using Fleet Manager' option includes a description: 'To connect to the instance using Fleet Manager Remote Desktop, the SSM Agent must be installed and running on the instance. For more information, see [Working with SSM Agent](#)'.

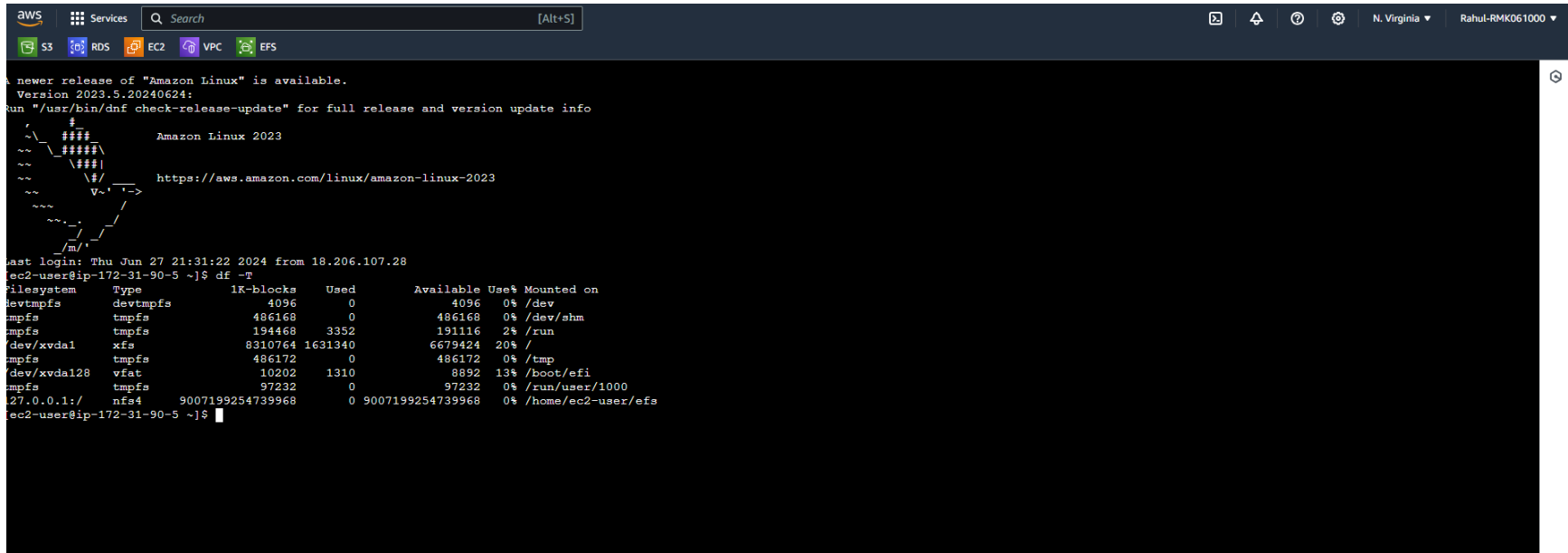
Below the connection types, a message says: 'You can connect to your Windows instance using a remote desktop client of your choice, and by downloading and running the RDP shortcut file below:'. There is a button labeled 'Download remote desktop file'.

Next, a message states: 'When prompted, connect to your instance using the following username and password:'. Below this, the 'Public DNS' is listed as 'ec2-3-149-234-115.us-east-2.compute.amazonaws.com'. The 'Username' is set to 'Administrator' in a dropdown menu. The 'Password' is 'gg9e;tiUs&NPWh-v(l7zluwNIZISCTfH'.

At the bottom, a note says: 'If you've joined your instance to a directory, you can use your directory credentials to connect to your instance.'



Mounting EFS on EC2 instance



```
newer release of "Amazon Linux" is available.
Version 2023.5.20240624:
Run "/usr/bin/dnf check-release-update" for full release and version update info

Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023

Last login: Thu Jun 27 21:31:22 2024 from 18.206.107.28
ec2-user@ip-172-31-90-5 ~]$ df -T
Filesystem                Type      1K-blocks    Used    Available Use% Mounted on
devtmpfs                  devtmpfs   4096          0         4096    0% /dev
tmpfs                     tmpfs     486168         0      486168    0% /dev/shm
tmpfs                     tmpfs     194468      3352      191116    2% /run
/dev/xvda1                xfs       8310764 1631340     6679424   20% /
tmpfs                     tmpfs      486172         0      486172    0% /tmp
/dev/xvda128              vfat       10202       1310         8892   13% /boot/efi
tmpfs                     tmpfs      97232         0       97232    0% /run/user/1000
127.0.0.1:/                nfs4    9007199254739968 0 9007199254739968 0% /home/ec2-user/efs
ec2-user@ip-172-31-90-5 ~]$
```