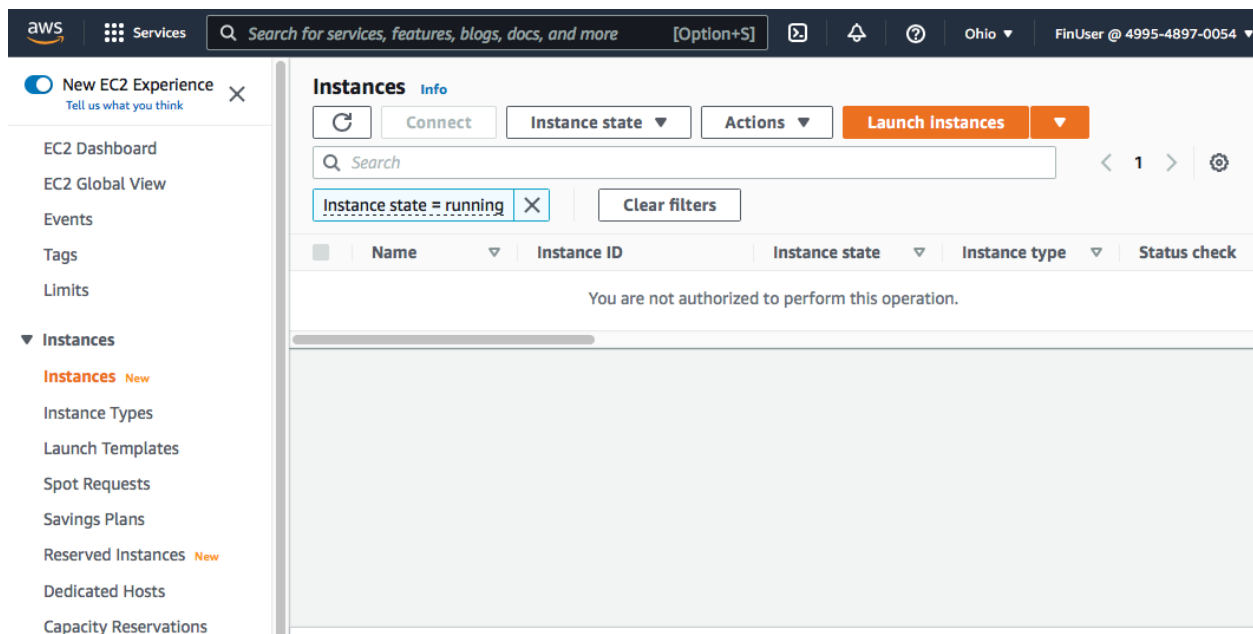
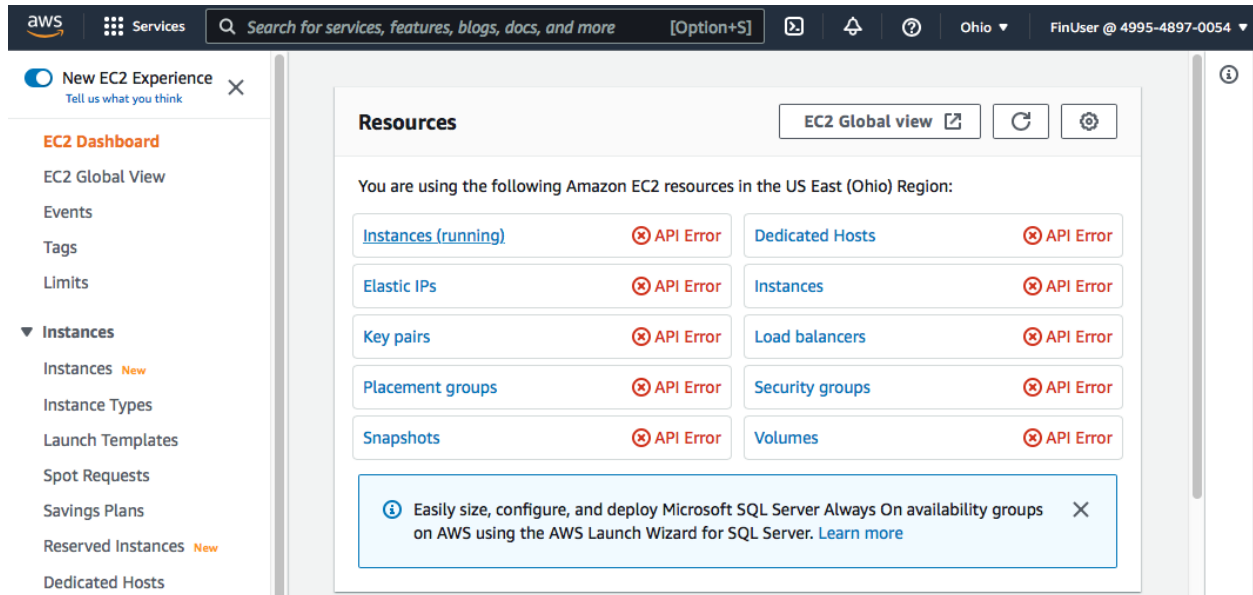


IAM User Creation:

6A. Is FinUser able to view and/or create an EC2 instance? No



6B. Is ITUser able to view EC2 instances? Yes
Is this user able to view Billing information? No

The screenshot shows the AWS Management Console interface for the 'Instances' page. The top navigation bar includes the AWS logo, 'Services', a search bar, and the user profile 'ITUser @ 4995-4897-0054'. The left sidebar lists navigation options: 'New EC2 Experience', 'EC2 Dashboard', 'EC2 Global View', 'Events', 'Tags', 'Limits', 'Instances' (expanded), 'Instances New', 'Instance Types', 'Launch Templates', 'Spot Requests', 'Savings Plans', 'Reserved Instances New', 'Dedicated Hosts', and 'Capacity Reservations'. The main content area is titled 'Instances Info' and includes buttons for 'Connect', 'Instance state', 'Actions', and 'Launch Instances'. A search bar and a filter 'Instance state = running' are present. Below the filter, a table header is visible with columns: 'Name', 'Instance ID', 'Instance state', 'Instance type', and 'Status check'. The message 'No matching instances found' is displayed in the center of the table area.

The screenshot shows the AWS Management Console interface for the 'Billing & Cost Management Dashboard'. The top navigation bar includes the AWS logo, 'Services', a search bar, and the user profile 'ITUser @ 4995-4897-0054'. The left sidebar lists navigation options: 'Home', 'Billing', 'Bills', 'Payments', 'Credits', 'Purchase orders', 'Cost & Usage', and 'Reports'. The main content area is titled 'Billing & Cost Management Dashboard'. A red error message is displayed in a box: 'You Need Permissions. You don't have permission to access billing information for this account. Contact your AWS administrator if you need help. If you are an AWS administrator, you can provide permissions for your users or groups by making sure that (1) [this account allows IAM and federated users to access billing information](#) and (2) you have the required IAM permissions.'

6C. Are both users able to access S3 ? Yes

The screenshot shows the AWS Management Console for the Amazon S3 service. The top navigation bar includes the AWS logo, a search bar, and the user's profile (ITUser @ 4995-4897-0054). The left sidebar shows the 'Amazon S3' service with various options like Buckets, Access Points, and Storage Lens. The main content area displays the 'Account snapshot' and a list of buckets. A table below the bucket list shows the details of the bucket 'data-54000'.

Name ▲	AWS Region ▼	Access ▼	Creation date ▼
data-54000	US East (Ohio) us-east-2	Bucket and objects not public	December 16, 2021, 18:55:13 (UTC-06:00)

This screenshot is identical to the one above, showing the AWS Management Console for the Amazon S3 service. The top navigation bar includes the AWS logo, a search bar, and the user's profile (FinUser @ 4995-4897-0054). The left sidebar shows the 'Amazon S3' service with various options like Buckets, Access Points, and Storage Lens. The main content area displays the 'Account snapshot' and a list of buckets. A table below the bucket list shows the details of the bucket 'data-54000'.

Name ▲	AWS Region ▼	Access ▼	Creation date ▼
data-54000	US East (Ohio) us-east-2	Bucket and objects not public	December 16, 2021, 18:55:13 (UTC-06:00)

6D. Is the AirlineUser able to access : S3, Billing and EC2? It has access to what they were given access to, so only S3

The screenshot shows the Amazon S3 console interface. The top navigation bar includes the AWS logo, a search bar, and the user profile 'AirlineUser @ 4995-4897-0054'. The left sidebar contains the 'Amazon S3' header and a menu with options like Buckets, Access Points, Object Lambda Access Points, Multi-Region Access Points, Batch Operations, Access analyzer for S3, Storage Lens, Dashboards, AWS Organizations settings, Feature spotlight (3), and AWS Marketplace for S3. The main content area is titled 'Amazon S3' and features an 'Account snapshot' section with a 'View Storage Lens dashboard' button. Below this is a 'Buckets (1)' section with a search bar and a table of buckets. The table has columns for Name, AWS Region, Access, and Creation date. One bucket is listed: 'data-54000' in 'US East (Ohio) us-east-2' region, with 'Bucket and objects not public' access and a creation date of 'December 16, 2021, 18:55:13 (UTC-06:00)'.

Name	AWS Region	Access	Creation date
data-54000	US East (Ohio) us-east-2	Bucket and objects not public	December 16, 2021, 18:55:13 (UTC-06:00)

The screenshot shows the 'Billing & Cost Management Dashboard'. The top navigation bar is the same as the previous screenshot. The left sidebar has a 'Home' header and a menu with options: Billing, Bills, Payments, Credits, and Purchase orders. The main content area displays a red error message: 'You Need Permissions'. The message states: 'You don't have permission to access billing information for this account. Contact your AWS administrator if you need help. If you are an AWS administrator, you can provide permissions for your users or groups by making sure that (1) this account allows IAM and federated users to access billing information and (2) you have the required IAM permissions.'

The screenshot shows the Amazon EC2 console interface. The top navigation bar includes the AWS logo, a search bar, and the user profile 'AirlineUser @ 4995-4897-0054'. The left sidebar contains the 'New EC2 Experience' header and a menu with options: EC2 Dashboard, EC2 Global View, Events, Tags, Limits, and Instances. The main content area is titled 'Instances' and features a search bar, a filter for 'Instance state = running', and a table of instances. The table has columns for Name, Instance ID, Instance state, Instance type, and Status check. A message at the bottom of the table states: 'You are not authorized to perform this operation.'

Using an S3 Bucket Policy:

8A. Is AirlineUser able to view and access the bucket and its contents? Yes, we did not restrict its access in the bucket policy

The screenshot shows the Amazon S3 console interface. On the left is a navigation pane with 'Amazon S3' selected. The main area displays the 'data-54000' bucket. Below the bucket name are tabs for 'Objects', 'Properties', 'Permissions', 'Metrics', 'Management', and 'Access Points'. The 'Objects' tab is active, showing a list of objects. There is one object, 'jan.csv', which is a CSV file, 18.1 MB in size, and stored in the 'Standard' storage class. The object was last modified on December 16, 2021, at 19:43:37 (UTC-06:00). Above the object list are various action buttons like 'Copy S3 URI', 'Copy URL', 'Download', 'Open', 'Delete', 'Actions', 'Create folder', and 'Upload'. A search bar is also present above the table.

Amazon S3 > data-54000

data-54000 [Info](#)

Objects | Properties | Permissions | Metrics | Management | Access Points

Objects (1)

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](#)

[Refresh](#) [Copy S3 URI](#) [Copy URL](#) [Download](#) [Open](#)

[Delete](#) [Actions](#) [Create folder](#) [Upload](#)

<input type="checkbox"/>	Name ▲	Type ▼	Last modified ▼	Size ▼	Storage class ▼
<input type="checkbox"/>	jan.csv	csv	December 16, 2021, 19:43:37 (UTC-06:00)	18.1 MB	Standard

8B. Is ITuser able to view and access the airline bucket and its contents? No, we restricted its access in the bucket policy

The screenshot displays the AWS Management Console interface for an Amazon S3 bucket named 'data-54000'. The user is logged in as 'ITUser @ 4995-4897-0054'. The left-hand navigation pane includes sections for 'Buckets', 'Storage Lens', and 'AWS Marketplace for S3'. The main content area is titled 'data-54000' and features tabs for 'Objects', 'Properties', 'Permissions', 'Metrics', 'Management', and 'Access Points'. The 'Objects' tab is active, showing a message about the fundamental entities stored in S3 and providing buttons for actions like 'Copy S3 URI', 'Copy URL', 'Download', 'Open', 'Delete', 'Actions', 'Create folder', and 'Upload'. Below these buttons is a search bar and a 'Show versions' toggle. A table header is visible with columns: 'Name', 'Type', 'Last modified', 'Size', and 'Storage class'. A prominent red error box at the bottom of the console states: 'Insufficient permissions to list objects. After you or your AWS administrator have updated your permissions to allow the s3:ListBucket action, refresh the page. Learn more about Identity and access management in Amazon S3.'

8C. Is FinUser able to view and access the bucket and its contents? No, we restricted its access in the bucket policy

The screenshot shows the AWS Management Console interface for the Amazon S3 service. The left-hand navigation pane is open, displaying the 'Amazon S3' section with various options like Buckets, Access Points, and Storage Lens. The main content area is titled 'data-54000' and includes tabs for Objects, Properties, Permissions, Metrics, Management, and Access Points. The 'Objects' tab is active, showing a list of objects. However, a red error message is displayed at the bottom of the console, indicating that the user 'FinUser' does not have sufficient permissions to list the objects in the bucket. The error message suggests updating permissions to allow the 's3:ListBucket' action and provides a link to learn more about identity and access management.

Amazon S3 ×

Buckets

- Access Points
- Object Lambda Access Points
- Multi-Region Access Points
- Batch Operations
- Access analyzer for S3

Block Public Access settings for this account

▼ **Storage Lens**

- Dashboards
- AWS Organizations settings

Feature spotlight 3

► AWS Marketplace for S3

Amazon S3 > data-54000

data-54000 Info

Objects | Properties | Permissions | Metrics | Management | Access Points

Objects

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](#)

Refresh Copy S3 URI Copy URL Download Open

Delete Actions Create folder Upload

Show versions < 1 > Settings

	Name	Type	Last modified	Size	Storage class
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Insufficient permissions to list objects

After you or your AWS administrator have updated your permissions to allow the `s3:ListBucket` action, refresh the page. Learn more about [Identity and access management in Amazon S3](#)