



# Pelatihan ABCD – Hari 5 Cloud Computing

Sekolah Teknik Elektro dan Informatika Institut Teknologi Bandung  
Universitas Singaperbangsa Karawang

# Introduction to Cloud 101

<https://www.awseducate.com/student/s/>

# **Lab 1: Amazon Simple Storage Service (Amazon S3)**

[https://awseducate.instructure.com/courses/746/assignments/3071?module\\_item\\_id=13184](https://awseducate.instructure.com/courses/746/assignments/3071?module_item_id=13184)

# Lab 1: Amazon Simple Storage Service (Amazon S3)

The screenshot shows a web browser window with the following details:

- Address Bar:** awseducate.instructure.com/courses/746/assignments/3071?module\_item\_id=13184
- Tab:** Lab 1 - Introduction to Amazon S3
- Header:** Getting Started, Imported From Fir..., Addons, New Tab, Network Research..., IEEE/ACM Internat..., Styles Archives -...
- Sidebar (Left):**
  - aws:** Home, Account, Dashboard.
  - Courses:** EN-US (selected), EN-US, Details, AWS, Start Lab, End Lab, --:--, Instructions, Grades, Actions.
  - History:**
  - Help:**
- Main Content Area:**
  - Section Header:** Lab 1 - Introduction to Amazon S3
  - Due:** No Due Date, **Points:** 100, **Submitting:** an external tool
  - Form:** Submit, Details, AWS, Start Lab, End Lab, --:--, Instructions, Grades, Actions.
  - Language Selection:** EN-US
  - Terminal Emulator:** bash, ddd\_v1\_w\_1Vu\_1834270@runweb67415:~\$
  - Text:**

**Lab 1: Introduction to Amazon Simple Storage Service (Amazon S3)**

### Lab overview and objectives

This lab teaches you the basic feature functionality of Amazon Simple Storage Service (Amazon S3) using the AWS Management Console.

Amazon S3 is an object storage service that offers
  - Navigation:** ▲ Previous, Next ▶

# Lab 1: Amazon Simple Storage Service (Amazon S3)

---

- ▶ After completing this lab, you will know how to:
  - ▶ Create a bucket in Amazon S3
  - ▶ Add an object to a bucket
  - ▶ Manage access permissions on an object and a bucket
  - ▶ Create a bucket policy
  - ▶ Use bucket versioning
- ▶ Durations
  - ▶ This lab requires approximately **60 minutes** to complete. You will have a total time of **240** minutes to complete this lab.

# Accessing the AWS Management Console

The screenshot shows a web browser window with the following details:

- Title Bar:** Lab 1 - Introduction to Amazon S3
- URL:** awseducate.instructure.com/courses/746/assignments/3071?module\_item\_id=13184
- Header:** Getting Started, Imported From Fir..., Addons, New Tab, Network Research..., IEEE/ACM Internat..., Styles Archives -...
- Sidebar (Left):**
  - aws logo
  - Account icon
  - Dashboard icon
  - Courses icon
  - History icon
  - Help icon
- Page Content:**
  - Section Title:** EDC101v1EN > Assignments > Lab 1 - Introduction to Amazon S3
  - Assignment Details:** Lab 1 - Introduction to Amazon S3, Due No Due Date, Points 100, Submitting an external tool.
  - Start Lab Dialog:** A modal window titled "Start Lab" displays the following information:
    - Region: us-east-1
    - Lab ID: arn:aws:cloudformation:us-east-1:729723988068:stack/c35460a46648913238654t1w729723988068/85dff4b0-754a-11ed-b048-124bbbaa9555
    - Creation Time: 2022-12-06T01:44:05-0800
    - Start session at: 2022-12-06T01:44:06-0800
    - Remaining session time: 01:00:00(60 minutes)
    - Lab status: ready
  - Message:** You will no longer be able to extend the lab or start a new one. You can find the total time available for this lab.
- Navigation:** Previous, Next
- Bottom Bar:** Day 5 - 9 Des 20....zip, Surat KK\_ 9205....doc, Surat KK\_ 9166....doc, Show All, X



## Task 1: Creating a bucket

# Task 1: Creating a bucket

The screenshot shows the AWS S3 Management Console interface. At the top, there are three tabs: 'Home', 'Lab 1 - Introduction to Amazon S3', and 'S3 Management Console'. The URL in the address bar is [s3.console.aws.amazon.com/s3/get-started?region=us-east-1](https://s3.console.aws.amazon.com/s3/get-started?region=us-east-1). The main content area features the Amazon S3 logo and the tagline 'Store and retrieve any amount of data from anywhere'. Below this, a paragraph explains that Amazon S3 is an object storage service. To the right, there are three sections: 'Create a bucket' (with a large orange 'Create bucket' button), 'Pricing' (with information about no minimum fees and a link to the Simple Monthly Calculator), and 'Resources' (with a link to the User guide). At the bottom left, there's a video thumbnail for 'Introduction to Amazon S3'. The footer contains links for Feedback, Language selection, Copyright (© 2022, Amazon Web Services, Inc. or its affiliates.), Privacy, Terms, and Cookie preferences.

Storage

## Amazon S3

Store and retrieve any amount of data from anywhere

Amazon S3 is an object storage service that offers industry-leading scalability, data availability, security, and performance.

### How it works

Introduction to Amazon S3

Salin link

aws.amazon.com/S3

[Create a bucket](#)

**Pricing**

With S3, there are no minimum fees. You only pay for what you use. Prices are based on the location of your S3 bucket.

Estimate your monthly bill using the [AWS Simple Monthly Calculator](#)

[View pricing details](#)

**Resources**

[User guide](#)

Feedback Looking for language selection? Find it in the new Unified Settings [\[ \]](#)

© 2022, Amazon Web Services, Inc. or its affiliates.

Privacy Terms [Cookie preferences](#)

# Create bucket

The screenshot shows the AWS S3 'Create bucket' wizard interface. At the top, the browser title bar reads 'Lab 1 - Introduction to Amazon' and the tab title is 'S3 bucket'. The URL in the address bar is 's3.console.aws.amazon.com/s3/bucket/create?region=us-east-1'. The AWS navigation bar includes 'Getting Started', 'Imported From Fir...', 'Addons', 'New Tab', 'Network Research...', 'IEEE/ACM Internat...', 'Styles Archives -...', and a user profile for 'voclabs/user2296696=Yoanes\_Bandung @ 7297-2398-8068'. The main content area shows the 'Create bucket' process.

**General configuration**

**Bucket name:** ybawsbucket2022

Bucket name must be globally unique and must not contain spaces or uppercase letters. [See rules for bucket naming](#)

**AWS Region:** US East (N. Virginia) us-east-1

**Copy settings from existing bucket - optional**  
Only the bucket settings in the following configuration are copied.  
[Choose bucket](#)

**Object Ownership** [Info](#)

Control ownership of objects written to this bucket from other AWS accounts and the use of access control lists (ACLs). Object ownership determines who can specify access to objects.

**ACLs disabled (recommended)**  
All objects in this bucket are owned by this account. Access to this bucket and its objects is specified using only policies.

**ACLs enabled**  
Objects in this bucket can be owned by other AWS accounts. Access to this bucket and its objects can be specified using ACLs.

**Feedback** Looking for language selection? Find it in the new Unified Settings [\[?\]](#)

© 2022, Amazon Web Services, Inc. or its affiliates. [Privacy](#) [Terms](#) [Cookie preferences](#)

# Create bucket

The screenshot shows the AWS S3 Bucket creation interface. The top navigation bar includes tabs for Home, Lab 1 - Introduction to Amazon, and S3 bucket. The URL in the address bar is s3.console.aws.amazon.com/s3/bucket/create?region=us-east-1. The main content area is titled "Block Public Access settings for this bucket". It contains a section about public access being granted through ACLs, bucket policies, or access point policies. A checked checkbox for "Block all public access" is selected, with a note that this setting is equivalent to turning on four specific sub-settings. These sub-settings are also checked: "Block public access to buckets and objects granted through new access control lists (ACLs)", "Block public access to buckets and objects granted through any access control lists (ACLs)", "Block public access to buckets and objects granted through new public bucket or access point policies", and "Block public and cross-account access to buckets and objects through any public bucket or access point policies". Below this, there is a "Bucket Versioning" section with a note about keeping multiple variants of an object. The "Disable" radio button is selected. At the bottom, there are links for Feedback, Language selection, Copyright notice, Privacy, Terms, and Cookie preferences.

**Block Public Access settings for this bucket**

Public access is granted to buckets and objects through access control lists (ACLs), bucket policies, access point policies, or all. In order to ensure that public access to this bucket and its objects is blocked, turn on Block all public access. These settings apply only to this bucket and its access points. AWS recommends that you turn on Block all public access, but before applying any of these settings, ensure that your applications will work correctly without public access. If you require some level of public access to this bucket or objects within, you can customize the individual settings below to suit your specific storage use cases. [Learn more](#)

**Block all public access**  
Turning this setting on is the same as turning on all four settings below. Each of the following settings are independent of one another.

- Block public access to buckets and objects granted through new access control lists (ACLs)**  
S3 will block public access permissions applied to newly added buckets or objects, and prevent the creation of new public access ACLs for existing buckets and objects. This setting doesn't change any existing permissions that allow public access to S3 resources using ACLs.
- Block public access to buckets and objects granted through any access control lists (ACLs)**  
S3 will ignore all ACLs that grant public access to buckets and objects.
- Block public access to buckets and objects granted through new public bucket or access point policies**  
S3 will block new bucket and access point policies that grant public access to buckets and objects. This setting doesn't change any existing policies that allow public access to S3 resources.
- Block public and cross-account access to buckets and objects through any public bucket or access point policies**  
S3 will ignore public and cross-account access for buckets or access points with policies that grant public access to buckets and objects.

**Bucket Versioning**

Versioning is a means of keeping multiple variants of an object in the same bucket. You can use versioning to preserve, retrieve, and restore every version of every object stored in your Amazon S3 bucket. With versioning, you can easily recover from both unintended user actions and application failures. [Learn more](#)

**Bucket Versioning**

Disable  
 Enable

Feedback Looking for language selection? Find it in the new Unified Settings [Learn more](#)

© 2022, Amazon Web Services, Inc. or its affiliates. [Privacy](#) [Terms](#) [Cookie preferences](#)

# Choose Create bucket

The screenshot shows the AWS S3 Bucket creation interface. At the top, there are tabs for Home, Lab 1 - Introduction to Amazon, and S3 bucket. The URL is s3.console.aws.amazon.com/s3/bucket/create?region=us-east-1. The AWS logo and Services menu are visible. A search bar contains [Option+S]. The user is signed in as voclabs/user2296696=Yoanes\_Bandung @ 7297-2398-8068.

**Tags (0) - optional**  
You can use bucket tags to track storage costs and organize buckets. [Learn more](#)

No tags associated with this bucket. [Add tag](#)

**Default encryption**  
Automatically encrypt new objects stored in this bucket. [Learn more](#)

Server-side encryption  
 Disable  
 Enable

**Advanced settings**

**Info** After creating the bucket you can upload files and folders to the bucket, and configure additional bucket settings.

[Cancel](#) [Create bucket](#)

Feedback Looking for language selection? Find it in the new Unified Settings [Learn more](#)

© 2022, Amazon Web Services, Inc. or its affiliates. [Privacy](#) [Terms](#) [Cookie preferences](#)

# Bucket created

The screenshot shows the AWS S3 Management Console interface. At the top, there are three tabs: "Home", "Lab 1 - Introduction to Amazon", and "S3 Management Console". The "S3 Management Console" tab is active. Below the tabs, the URL is s3.console.aws.amazon.com/s3/buckets?region=us-east-1. The main content area has a green banner at the top stating "Successfully created bucket 'ybawsbucket2022'". It also includes a link to "View details" and a note about replicating data using AWS Replication. A blue banner below it encourages using AWS Replication. The left sidebar shows navigation links for "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", and "AWS Marketplace for S3". The main content area displays an "Account snapshot" section with a storage lens dashboard link. Below that is a "Buckets (1)" table. The table has a header row with columns: Name, AWS Region, Access, and Creation date. There is one data row for the bucket "ybawsbucket2022", which is located in the "US East (N. Virginia) us-east-1" region, has "Bucket and objects not public" access, and was created on "December 4, 2022, 21:08:23 (UTC+07:00)". Action buttons for "Copy ARN", "Empty", "Delete", and "Create bucket" are available above the table.

Name	AWS Region	Access	Creation date
ybawsbucket2022	US East (N. Virginia) us-east-1	Bucket and objects not public	December 4, 2022, 21:08:23 (UTC+07:00)

Feedback Looking for language selection? Find it in the new Unified Settings [\[ \]](#)

© 2022, Amazon Web Services, Inc. or its affiliates. [Privacy](#) [Terms](#) [Cookie preferences](#)



## Task 2: Uploading an object to the bucket

# Uploading an object to the bucket

The screenshot shows the AWS S3 console interface. The top navigation bar includes tabs for Home, Lab 1 - Introduction to Amazon, and the current bucket, ybawsbucket2022 - S3 bucket. The URL in the address bar is s3.console.aws.amazon.com/s3/buckets/ybawsbucket2022?region=us-east-1&tab=objects.

The left sidebar contains a 'Buckets' section with links to Access Points, Object Lambda Access Points, Multi-Region Access Points, Batch Operations, and Access analyzer for S3. It also includes sections for Block Public Access settings for this account, Storage Lens (Dashboards and AWS Organizations settings), Feature spotlight (with 3 items), and AWS Marketplace for S3.

The main content area displays the 'ybawsbucket2022' bucket details. A blue banner at the top says 'Replicate data within and between AWS Regions using Amazon S3 Replication.' with a 'View tutorial' button. The breadcrumb navigation shows Amazon S3 > Buckets > ybawsbucket2022.

The bucket name 'ybawsbucket2022' is displayed with an 'Info' link. Below it is a navigation bar with tabs: Objects (highlighted in orange), Properties, Permissions, Metrics, Management, and Access Points.

The 'Objects (0)' section contains instructions about objects in S3, a search bar, and a toolbar with buttons for Copy S3 URI, Copy URL, Download, Open, Delete, Actions (dropdown), and Create folder. An 'Upload' button is prominently displayed.

The object list table has columns for Name, Type, Last modified, Size, and Storage class. A message below the table states 'No objects' and 'You don't have any objects in this bucket.' with another 'Upload' button.

The bottom of the page includes a feedback link, copyright information (© 2022, Amazon Web Services, Inc. or its affiliates.), and links for Privacy, Terms, and Cookie preferences. A file preview for 'new-report.png' is shown in the bottom left, and a 'Show All' button is in the bottom right.

# Uploading an object to the bucket

The screenshot shows the AWS S3 Management Console interface for uploading objects to a bucket. The browser tab is titled "Lab 1 - Introduction to Amazon" and the sub-tab is "S3 Management Console". The URL in the address bar is "s3.console.aws.amazon.com/s3/upload/ybawsbucket2022?region=us-east-1". The main navigation bar includes "Home", "Getting Started", "Imported From Fir...", "Addons", "New Tab", "Network Research...", "IEEE/ACM Internat...", "Styles Archives -...", and a user profile icon.

The top navigation bar also shows "aws Services" and a search bar with placeholder "[Option+S]". Below the navigation is a breadcrumb trail: "Amazon S3 > Buckets > ybawsbucket2022 > Upload".

The main content area is titled "Upload" with a "Info" link. It contains instructions: "Add the files and folders you want to upload to S3. To upload a file larger than 160GB, use the AWS CLI, AWS SDK or Amazon S3 REST API. [Learn more](#)".

A large dashed blue box provides a "Drag and drop files and folders you want to upload here, or choose Add files, or Add folders." area.

The "Files and folders" section shows one item: "new-report.png" (1 Total, 84.0 KB). It includes "Remove", "Add files", and "Add folder" buttons. A search bar "Find by name" is present above the list. The table headers are Name, Folder, Type, and Size.

Name	Folder	Type	Size
new-report.png	-	image/png	84.0 KB

The "Destination" section shows the destination as "s3://ybawsbucket2022". It includes a "Destination details" section with the subtext "Bucket settings that impact new objects stored in the specified destination."

At the bottom, there are footer links for "Feedback", "Looking for language selection? Find it in the new Unified Settings", "© 2022, Amazon Web Services, Inc. or its affiliates.", "Privacy", "Terms", and "Cookie preferences". The status bar at the bottom shows "new-report.png" and "Show All" with a close button.

# Uploading an object to the bucket

The screenshot shows the AWS S3 Management Console interface for uploading an object to a bucket. The browser tab is titled "Lab 1 - Introduction to Amazon" and the sub-tab is "S3 Management Console". The URL is "s3.console.aws.amazon.com/s3/upload/ybawsbucket2022?region=us-east-1".

The main area displays a file upload form:

- A large dashed blue box labeled "Drag and drop files and folders you want to upload here, or choose Add files, or Add folders."
- A "Files and folders" section showing one item: "new-report.png" (1 Total, 84.0 KB). It includes "Remove", "Add files", and "Add folder" buttons.
- A "Destination" section with the URL "s3://ybawsbucket2022".
- Expansion sections:
  - "Destination details": "Bucket settings that impact new objects stored in the specified destination."
  - "Permissions": "Grant public access and access to other AWS accounts."
  - "Properties": "Specify storage class, encryption settings, tags, and more."
- Buttons at the bottom: "Cancel" and "Upload" (highlighted in orange).

At the bottom of the page, there is a footer with links: Feedback, Looking for language selection? Find it in the new Unified Settings, © 2022, Amazon Web Services, Inc. or its affiliates., Privacy, Terms, and Cookie preferences. There is also a "Show All" button and a close icon (X) in the bottom right corner.

# Upload succeeded appears

The screenshot shows the AWS S3 Management Console interface. At the top, there are three tabs: "Home", "Lab 1 - Introduction to Amazon", and "S3 Management Console". The URL in the address bar is `s3.console.aws.amazon.com/s3/upload/ybawsbucket2022?region=us-east-1`. The main navigation bar includes "Getting Started", "Imported From Fir...", "Addons", "New Tab", "Network Research...", "IEEE/ACM Internat...", and "Styles Archives -...". Below the navigation bar, the AWS logo and "Services" link are visible, along with a search bar containing "[Option+S]" and a "Global" dropdown.

A green notification bar at the top left says "Upload succeeded" with a circular icon and "View details below." Below this, a modal window titled "Upload: status" is open. It contains a message: "The information below will no longer be available after you navigate away from this page." The "Summary" section shows the destination as "s3://ybawsbucket2022". It lists "Succeeded" with "1 file, 84.0 KB (100.00%)" and "Failed" with "0 files, 0 B (0%)".

Below the summary, there are two tabs: "Files and folders" (which is selected) and "Configuration". The "Files and folders" tab displays a table with one item: "new-report.png". The table columns are Name, Folder, Type, Size, Status, and Error. The data is:

Name	Folder	Type	Size	Status	Error
new-report.png	-	image/png	84.0 KB	Succeeded	-

At the bottom of the page, there is a feedback link: "Looking for language selection? Find it in the new Unified Settings", a copyright notice: "© 2022, Amazon Web Services, Inc. or its affiliates.", and links for "Privacy", "Terms", and "Cookie preferences". A sidebar on the left shows a thumbnail for "new-report.png".



## Task 3: Making an object public

# Choose the new-report.png file name

The screenshot shows the AWS S3 console interface. At the top, there are three tabs: 'Home', 'Lab 1 - Introduction to Amazon...', and 'ybawsbucket2022 - S3 bucket'. The main navigation bar includes links for 'Getting Started', 'Imported From Fir...', 'Addons', 'New Tab', 'Network Research...', 'IEEE/ACM Internat...', and 'Styles Archives -...'. The 'Services' dropdown is set to 'Amazon S3'. A search bar contains the placeholder '[Option+S]'. On the right side of the header, there are icons for 'Global', a user profile, and a dropdown menu.

In the center, a blue banner displays the message: 'Replicate data within and between AWS Regions using Amazon S3 Replication.' with a 'View tutorial' button and a close icon. Below the banner, the breadcrumb navigation shows 'Amazon S3 > Buckets > ybawsbucket2022'. The bucket name 'ybawsbucket2022' is followed by an 'Info' link. A horizontal navigation bar below the breadcrumb includes tabs for 'Objects' (which is selected), 'Properties', 'Permissions', 'Metrics', 'Management', and 'Access Points'.

The main content area is titled 'Objects (1)'. It contains a brief description of objects in S3 and a 'Learn more' link. Below this are several action buttons: 'Copy S3 URI', 'Copy URL', 'Download', 'Open', 'Delete', 'Actions', 'Create folder', and 'Upload'. A search bar labeled 'Find objects by prefix' is also present. At the bottom of the object list, there are sorting and filtering options for columns: 'Name', 'Type', 'Last modified', 'Size', and 'Storage class'. The single object listed is 'new-report.png', which is a 'png' file from December 4, 2022, at 21:12:01 (UTC+07:00), with a size of 84.0 KB and a storage class of Standard.

At the very bottom of the page, there is a footer with links for 'Feedback', 'Language selection', 'Privacy', 'Terms', and 'Cookie preferences'. A small sidebar on the left shows a thumbnail of the 'new-report.png' file.

# Locate and copy the Object URL link

The screenshot shows the AWS S3 console interface. The top navigation bar includes tabs for Home, Lab 1 - Introduction to Amazon, and ybawsbucket2022 - S3 bucket. The main content area shows the file structure: Amazon S3 > Buckets > ybawsbucket2022 > new-report.png. Below this, the file name "new-report.png" is displayed with an "Info" link. A row of buttons provides actions: Copy S3 URI, Download, Open, and Object actions. The "Properties" tab is selected in the navigation bar.

**Object overview**

Attribute	Value
Owner	awslabscOw92327t1543164743
AWS Region	US East (N. Virginia) us-east-1
Last modified	December 4, 2022, 21:12:01 (UTC+07:00)
Size	84.0 KB
Type	png
Key	<a href="#">new-report.png</a>
S3 URI	<a href="s3://ybawsbucket2022/new-report.png">s3://ybawsbucket2022/new-report.png</a>
Amazon Resource Name (ARN)	<a href="arn:aws:s3:::ybawsbucket2022/new-report.png">arn:aws:s3:::ybawsbucket2022/new-report.png</a>
Entity tag (Etag)	<a href="#">75acf5a0dd2f6bdd67c36fa2748a1a19</a>
Object URL	<a href="https://ybawsbucket2022.s3.amazonaws.com/new-report.png">https://ybawsbucket2022.s3.amazonaws.com/new-report.png</a>

Feedback: Looking for language selection? Find it in the new Unified Settings [Show All](#) [x](#)

© 2022, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

# Locate and copy the Object URL link

---

- ▶ <https://ybawsbucket2022.s3.amazonaws.com/new-report.png>

# Access Denied error because objects in Amazon S3 are private by default

The screenshot shows a web browser window with the following details:

- Address Bar:** https://ybawsbucket2022.s3.amazonaws.com/new-report.png
- Tab Bar:** Home, Lab 1 - Introduction to Amazon, ybawsbucket2022 - S3 bucket, https://ybawsbucket2022.s3.amazonaws.com/new-report.png
- Toolbar:** Back, Forward, Stop, Refresh, Home, Bookmarks, New Tab, Network Research..., IEEE/ACM Internat..., Styles Archives -...
- Content Area:** A black rectangular area containing the XML error response.

The XML error response is as follows:

```
<Error>
<Code>AccessDenied</Code>
<Message>Access Denied</Message>
<RequestId>504T8PB35AH10BP</RequestId>
<HostId>m2dUe4TIPf5YPoDzr/pCtZ+PCJW1MBVr5jYtc2B9X8QH6tIFwvUfLCKpiytckhNgapylkprBNzo=</HostId>
</Error>
```

# Make public via ACL is greyed out

The screenshot shows the AWS S3 console interface. At the top, there's a browser-like header with tabs for 'Home', 'Lab 1 - Introduction to Amazon', 'ybawsbucket2022 - S3 bucket', and a URL. Below this is the AWS navigation bar with 'Services' selected. The main content area shows the file 'new-report.png' in the 'ybawsbucket2022' bucket. The 'Properties' tab is active. On the right, there's a 'Object actions' dropdown menu with several options: 'Download as', 'Share with a presigned URL', 'Calculate total size', 'Copy', 'Move', 'Initiate restore', 'Query with S3 Select', 'Edit actions', 'Rename object', 'Edit storage class', 'Edit server-side encryption', 'Edit metadata', 'Edit tags', and 'Make public using ACL'. The 'Make public using ACL' option is highlighted with a blue background and white text. At the bottom, there are links for 'Feedback', 'Language selection', 'Copyright', 'Privacy', 'Terms', and 'Cookie preferences'.

new-report.png [Info](#)

[Properties](#) [Permissions](#) [Versions](#)

**Object overview**

Owner	s3://ybawsbucket2022/new-report.png
AWS Region	arn:aws:s3:::ybawsbucket2022/new-report.png
Last modified	Entity tag (Etag)
December 4, 2022, 21:12:01 (UTC+07:00)	75acf5a0dd2f6bdd67c36fa2748a1a19
Size	Object URL
84.0 KB	<a href="https://ybawsbucket2022.s3.amazonaws.com/new-report.png">https://ybawsbucket2022.s3.amazonaws.com/new-report.png</a>
Type	
png	
Key	
<a href="#">new-report.png</a>	

[Copy S3 URI](#) [Download](#) [Open](#) [Object actions](#)

Object actions ▾

- Download as
- Share with a presigned URL
- Calculate total size
- Copy
- Move
- Initiate restore
- Query with S3 Select
- Edit actions
- Rename object
- Edit storage class
- Edit server-side encryption
- Edit metadata
- Edit tags
- Make public using ACL

Feedback Looking for language selection? Find it in the new Unified Settings [?](#)

© 2022, Amazon Web Services, Inc. or its affiliates. [Privacy](#) [Terms](#) [Cookie preferences](#)

# Edit Permissions

The screenshot shows the AWS S3 console interface for managing object permissions. The object being viewed is `new-report.png` located in the `ybawsbucket2022` bucket. The `Permissions` tab is currently selected.

**Access control list (ACL)**

Grant basic read/write permissions to AWS accounts. [Learn more](#)

This bucket has the bucket owner enforced setting applied for Object Ownership  
When [bucket owner enforced](#) is applied, use bucket policies to control access. [Learn more](#)

Grantee	Object	Object ACL
Object owner (your AWS account) Canonical ID: <a href="#">5370507e61e1381f406930549c58a819488c2c73777d69fa897889c306e11c94</a>	Read	Read, Write
Everyone (public access) Group: <a href="#">http://acs.amazonaws.com/groups/global/AllUsers</a>	-	-
Authenticated users group (anyone with an AWS account) Group: <a href="#">http://acs.amazonaws.com/groups/global/AuthenticatedUsers</a>	-	-

[Feedback](#) Looking for language selection? Find it in the new Unified Settings [\[?\]](#)

© 2022, Amazon Web Services, Inc. or its affiliates. [Privacy](#) [Terms](#) [Cookie preferences](#)

# Edit Permissions

The screenshot shows the 'Edit Object Ownership' page for the 'ybawsbucket2022' bucket. The top navigation bar includes tabs for Home, Lab 1 - Introduction to Amazon, and the current page, ybawsbucket2022 - S3 bucket. The URL is https://ybawsbucket2022.s3.amazonaws.com/s3/bucket/ybawsbucket2022/property/oo/edit?region=us-east-1. The page title is 'Edit Object Ownership'.

**Object Ownership**

Control ownership of objects written to this bucket from other AWS accounts and the use of access control lists (ACLs). Object ownership determines who can specify access to objects.

**ACLs disabled (recommended)**  
All objects in this bucket are owned by this account. Access to this bucket and its objects is specified using only policies.

**ACLs enabled**  
Objects in this bucket can be owned by other AWS accounts. Access to this bucket and its objects can be specified using ACLs.

**⚠️ Enabling ACLs turns off the bucket owner enforced setting for Object Ownership**  
Once the bucket owner enforced setting is turned off, access control lists (ACLs) and their associated permissions are restored. Access to objects that you do not own will be based on ACLs and not the bucket policy.

I acknowledge that ACLs will be restored.

**Object Ownership**

**Bucket owner preferred**  
If new objects written to this bucket specify the bucket-owner-full-control canned ACL, they are owned by the bucket owner. Otherwise, they are owned by the object writer.

**Object writer**  
The object writer remains the object owner.

**ⓘ If you want to enforce object ownership for new objects only, your bucket policy must specify that the**

**Feedback** Looking for language selection? Find it in the new Unified Settings

© 2022, Amazon Web Services, Inc. or its affiliates. [Privacy](#) [Terms](#) [Cookie preferences](#)

# Edit Permissions

The screenshot shows the AWS S3 console interface for editing bucket permissions. The top navigation bar includes tabs for Home, Lab 1 - Introduction to Amazon, and the current bucket (ybawsbucket2022 - S3 bucket). The URL in the address bar is https://ybawsbucket2022.s3.amazonaws.com/property/oo/edit?region=us-east-1. The main content area is titled "Object Ownership". It explains that it controls ownership of objects written to the bucket from other AWS accounts and the use of access control lists (ACLs). It notes that object ownership determines who can specify access to objects.

Two options are presented:

- ACLs disabled (recommended)**  
All objects in this bucket are owned by this account. Access to this bucket and its objects is specified using only policies.
- ACLs enabled**  
Objects in this bucket can be owned by other AWS accounts. Access to this bucket and its objects can be specified using ACLs.

A warning message states: "Enabling ACLs turns off the bucket owner enforced setting for Object Ownership. Once the bucket owner enforced setting is turned off, access control lists (ACLs) and their associated permissions are restored. Access to objects that you do not own will be based on ACLs and not the bucket policy." A checkbox below the message is checked, indicating acknowledgement: "I acknowledge that ACLs will be restored."

The "Object Ownership" section contains two options:

- Bucket owner preferred**  
If new objects written to this bucket specify the bucket-owner-full-control canned ACL, they are owned by the bucket owner. Otherwise, they are owned by the object writer.
- Object writer**  
The object writer remains the object owner.

A note in a callout box states: "If you want to enforce object ownership for new objects only, your bucket policy must specify that the bucket-owner-full-control canned ACL is required for object uploads. [Learn more](#)"

At the bottom right are "Cancel" and "Save changes" buttons. The footer includes links for Feedback, Language selection, Copyright notice (© 2022, Amazon Web Services, Inc. or its affiliates.), Privacy, Terms, and Cookie preferences.

# Edit block public access (bucket settings)

The screenshot shows a browser window with the AWS S3 console open to the 'Permissions' tab of the 'ybawsbucket2022' bucket. A green success message at the top indicates 'Successfully edited Object Ownership.' Below it, a blue bar provides information about Amazon S3 Replication. The main content area displays the 'Permissions overview' and the 'Block public access (bucket settings)' section. In this section, the 'Block all public access' setting is turned 'On'. The bottom of the page includes standard AWS footer links for Feedback, Language selection, Copyright, Privacy, Terms, and Cookie preferences.

Successfully edited Object Ownership.

Replicate data within and between AWS Regions using Amazon S3 Replication.

View tutorial

Amazon S3 > Buckets > ybawsbucket2022

## ybawsbucket2022 Info

Objects Properties Permissions Metrics Management Access Points

### Permissions overview

Access

Bucket and objects not public

#### Block public access (bucket settings)

Public access is granted to buckets and objects through access control lists (ACLs), bucket policies, access point policies, or all. In order to ensure that public access to all your S3 buckets and objects is blocked, turn on Block all public access. These settings apply only to this bucket and its access points. AWS recommends that you turn on Block all public access, but before applying any of these settings, ensure that your applications will work correctly without public access. If you require some level of public access to your buckets or objects within, you can customize the individual settings below to suit your specific storage use cases. [Learn more](#)

[Edit](#)

#### Block all public access

On

► Individual Block Public Access settings for this bucket

Feedback Looking for language selection? Find it in the new Unified Settings [Edit](#)

© 2022, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

# Clear the check box for the Block all public access option

The screenshot shows a browser window with the URL <https://ybawsbucket2022.s3.amazonaws.com/>. The page is titled "Edit Block public access (bucket settings)". A callout box highlights the "Block all public access" checkbox, which is currently checked. Below the checkbox, there is descriptive text about how it affects bucket and object access through ACLs, policies, and cross-account access.

**Block public access (bucket settings)**

Public access is granted to buckets and objects through access control lists (ACLs), bucket policies, access point policies, or all. In order to ensure that public access to all your S3 buckets and objects is blocked, turn on Block all public access. These settings apply only to this bucket and its access points. AWS recommends that you turn on Block all public access, but before applying any of these settings, ensure that your applications will work correctly without public access. If you require some level of public access to your buckets or objects within, you can customize the individual settings below to suit your specific storage use cases. [Learn more](#)

**Block all public access**  
Turning this setting on is the same as turning on all four settings below. Each of the following settings are independent of one another.

- Block public access to buckets and objects granted through new access control lists (ACLs)**  
S3 will block public access permissions applied to newly added buckets or objects, and prevent the creation of new public access ACLs for existing buckets and objects. This setting doesn't change any existing permissions that allow public access to S3 resources using ACLs.
- Block public access to buckets and objects granted through any access control lists (ACLs)**  
S3 will ignore all ACLs that grant public access to buckets and objects.
- Block public access to buckets and objects granted through new public bucket or access point policies**  
S3 will block new bucket and access point policies that grant public access to buckets and objects. This setting doesn't change any existing policies that allow public access to S3 resources.
- Block public and cross-account access to buckets and objects through any public bucket or access point policies**  
S3 will ignore public and cross-account access for buckets or access points with policies that grant public access to buckets and objects.

[Cancel](#) [Save changes](#)

[Feedback](#) Looking for language selection? Find it in the new Unified Settings

© 2022, Amazon Web Services, Inc. or its affiliates. [Privacy](#) [Terms](#) [Cookie preferences](#)

# Confirm for Edit Block public access

The screenshot shows a browser window with the URL <https://ybawsbucket2022.s3.amazonaws.com/>. The page title is "Edit Block public access (bucket settings)". A modal dialog box is open, titled "Edit Block public access (bucket settings)". Inside the dialog, there is a warning message: "⚠️ Updating the Block Public Access settings for this bucket will affect this bucket and all objects within. This may result in some objects becoming public." Below the message, it says "To confirm the settings, enter **confirm** in the field." A text input field contains the word "confirm". At the bottom of the dialog are "Cancel" and "Confirm" buttons. In the background, the main S3 bucket settings page is visible, showing various configuration options for the bucket.

Block public access (bucket settings)

Public access is granted to buckets and objects through access control lists (ACLs), bucket policies, access point policies, or all. In order to ensure that public access to all your S3 buckets and objects is blocked, you must turn on the Block public access setting for each individual bucket and its access points. AWS recommends that you turn on this setting for all buckets and access points within your account. This way, your applications will work correctly without public access to objects within the bucket. Within the bucket, you can customize the individual settings below to further restrict access.

**Block all public access**  
Turning this setting on is the same as turning on all four other settings at once.

**Block public access to buckets and objects**  
S3 will block public access permissions applied to ACLs for existing buckets and objects. This setting does not affect new buckets and objects.

**Block public access to buckets and objects**  
S3 will ignore all ACLs that grant public access to buckets and objects.

**Block public access to buckets and objects**  
S3 will block new bucket and access point policies that grant public access to buckets and objects. This setting doesn't change any existing policies that allow public access to S3 resources.

**Block public and cross-account access to buckets and objects through any public bucket or access point policies**  
S3 will ignore public and cross-account access for buckets or access points with policies that grant public access to buckets and objects.

**Edit Block public access (bucket settings)**

⚠️ Updating the Block Public Access settings for this bucket will affect this bucket and all objects within. This may result in some objects becoming public.

To confirm the settings, enter **confirm** in the field.

confirm

Cancel Confirm

Save changes

Feedback Looking for language selection? Find it in the new Unified Settings

© 2022, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

# Successfully edited Block Public Access settings for this bucket

The screenshot shows a browser window with the AWS S3 console open to the 'Permissions' tab of the 'ybawsbucket2022' bucket. A green success message at the top states 'Successfully edited Block Public Access settings for this bucket.' Below it, a blue info message says 'Replicate data within and between AWS Regions using Amazon S3 Replication.' A 'View tutorial' button is available for the replication message. The main content area displays the 'Permissions overview' section, which includes a note that objects can be public. The 'Block public access (bucket settings)' section is expanded, showing that 'Block all public access' is currently 'Off'. There is an 'Edit' button next to the setting. At the bottom, there are links for feedback, language selection, copyright information, and various AWS links.

Successfully edited Block Public Access settings for this bucket.

Replicate data within and between AWS Regions using Amazon S3 Replication.

View tutorial

Amazon S3 > Buckets > ybawsbucket2022

## ybawsbucket2022 [Info](#)

Objects Properties **Permissions** Metrics Management Access Points

### Permissions overview

Access  
Objects can be public

### Block public access (bucket settings)

Public access is granted to buckets and objects through access control lists (ACLs), bucket policies, access point policies, or all. In order to ensure that public access to all your S3 buckets and objects is blocked, turn on Block all public access. These settings apply only to this bucket and its access points. AWS recommends that you turn on Block all public access, but before applying any of these settings, ensure that your applications will work correctly without public access. If you require some level of public access to your buckets or objects within, you can customize the individual settings below to suit your specific storage use cases. [Learn more](#)

[Edit](#)

#### Block all public access

⚠ Off

▶ Individual Block Public Access settings for this bucket

Feedback Looking for language selection? Find it in the new Unified Settings [?](#)

© 2022, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

# Make public

The screenshot shows the AWS S3 console interface. At the top, there's a browser-like header with tabs for 'Home', 'Lab 1 - Introduction to Amazon...', 'ybawsbucket2022 - S3 bucket', and a URL. Below this is the AWS navigation bar with 'Services' selected. The main content area shows the 'Amazon S3 > Buckets > ybawsbucket2022 > new-report.png' path. On the left, there's a sidebar with 'Properties', 'Permissions', and 'Versions' tabs, with 'Properties' currently active. The main panel displays 'Object overview' with details like Owner (awslabscOw92327t1543164743), AWS Region (US East (N. Virginia) us-east-1), Last modified (December 4, 2022, 21:12:01 (UTC+07:00)), Size (84.0 KB), Type (png), and Key (new-report.png). To the right of these details is a vertical 'Object actions' menu. This menu includes options like 'Download as', 'Share with a presigned URL', 'Calculate total size', 'Copy', 'Move', 'Initiate restore', 'Query with S3 Select', and several 'Edit actions' options: 'Rename object', 'Edit storage class', 'Edit server-side encryption', 'Edit metadata', 'Edit tags', and 'Make public using ACL'. The 'Make public using ACL' option is highlighted with a red box.

new-report.png [Info](#)

Properties Permissions Versions

**Object overview**

Owner	S3 URI
awslabscOw92327t1543164743	<a href="s3://ybawsbucket2022/new-report.png">s3://ybawsbucket2022/new-report.png</a>
AWS Region	Amazon Resource Name (ARN)
US East (N. Virginia) us-east-1	<a href="arn:aws:s3:::ybawsbucket2022/new-report.png">arn:aws:s3:::ybawsbucket2022/new-report.png</a>
Last modified	Entity tag (Etag)
December 4, 2022, 21:12:01 (UTC+07:00)	<a href="#">75acf5a0dd2f6bdd67c36fa2748a1a19</a>
Size	Object URL
84.0 KB	<a href="https://ybawsbucket2022.s3.amazonaws.com/new-report.png">https://ybawsbucket2022.s3.amazonaws.com/new-report.png</a>
Type	
png	
Key	
<a href="#">new-report.png</a>	

Object actions ▾

- Download as
- Share with a presigned URL
- Calculate total size
- Copy
- Move
- Initiate restore
- Query with S3 Select
- Edit actions
- Rename object
- Edit storage class
- Edit server-side encryption
- Edit metadata
- Edit tags
- Make public using ACL**

Feedback Looking for language selection? Find it in the new Unified Settings [\[ \]](#)

© 2022, Amazon Web Services, Inc. or its affiliates. [Privacy](#) [Terms](#) [Cookie preferences](#)

# Make public

The screenshot shows a browser window with the AWS S3 console open. The URL in the address bar is `s3.console.aws.amazon.com/s3/buckets/ybawsbucket2022/object/edit_public_read_access?region=us-east-1&showversions=false`. The page title is "ybawsbucket2022 - S3 bucket". The main content area displays a blue header bar with the text "Replicate data within and between AWS Regions using Amazon S3 Replication." and a "View tutorial" button. Below this, the breadcrumb navigation shows "Amazon S3 > Buckets > ybawsbucket2022 > Make public". The main section is titled "Make public" with an "Info" link. It contains a warning message: "When public read access is enabled and not blocked by Block Public Access settings, anyone in the world can access the specified objects." A table titled "Specified objects" lists one item: "new-report.png" (Type: png, Last modified: December 4, 2022, 21:12:01 (UTC+07:00), Size: 84.0 KB). At the bottom right of the dialog are "Cancel" and "Make public" buttons. The browser interface includes tabs for Home, Lab 1 - Introduction to Amazon, and https://ybawsbucket2022.s3.amazonaws.com. The address bar also shows "Getting Started", "Imported From Fir...", "Addons", "New Tab", "Network Research...", "IEEE/ACM Internat...", and "Styles Archives -...". The top right of the browser has user profile information: "voclabs/user2296696=Yoanes\_Bandung @ 7297-2398-8068".

Replicate data within and between AWS Regions using Amazon S3 Replication.

View tutorial

Amazon S3 > Buckets > ybawsbucket2022 > Make public

## Make public Info

The make public action enables public read access in the object access control list (ACL) settings. [Learn more](#)

**Specified objects**

Name	Type	Last modified	Size
<a href="#">new-report.png</a>	png	December 4, 2022, 21:12:01 (UTC+07:00)	84.0 KB

Cancel **Make public**

Feedback Looking for language selection? Find it in the new Unified Settings [?](#)

© 2022, Amazon Web Services, Inc. or its affiliates. [Privacy](#) [Terms](#) [Cookie preferences](#)

# Successfully edited public access

The screenshot shows a browser window with the AWS S3 console open. The URL in the address bar is `https://ybawsbucket2022.s3.amazonaws.com/`. The page displays a green success message: "Successfully edited public access. View details below." Below this, a blue banner says "Replicate data within and between AWS Regions using Amazon S3 Replication." A "View tutorial" button is visible. The main content area is titled "Make public: status". It contains a summary table with two rows: one for "Source" (s3://ybawsbucket2022) showing "Successfully edited public access" and "1 object, 84.0 KB", and another for "Failed to edit public access" showing "0 objects". Below this, a table lists "Failed to edit public access (0)" with no objects found. The bottom of the page includes standard AWS footer links like Feedback, Privacy, Terms, and Cookie preferences.

Successfully edited public access

View details below.

Replicate data within and between AWS Regions using Amazon S3 Replication.

View tutorial

## Make public: status

The information below will no longer be available after you navigate away from this page.

Summary		
Source s3://ybawsbucket2022	Successfully edited public access 1 object, 84.0 KB	Failed to edit public access 0 objects

Failed to edit public access Configuration

Failed to edit public access (0)					
Find objects by name					
Name	Folder	Type	Last modified	Size	Error
No objects failed to edit					

Feedback Looking for language selection? Find it in the new Unified Settings [?](#)

© 2022, Amazon Web Services, Inc. or its affiliates. [Privacy](#) [Terms](#) [Cookie preferences](#)

# Open Object URL in a browser

The screenshot shows the AWS S3 console interface. At the top, there's a browser-like header with tabs for 'Home', 'Lab 1 - Introduction to Amazon', 'ybawsbucket2022 - S3 bucket', and the current page 'https://ybawsbucket2022.s3.amazonaws.com/new-report.png'. Below this is the AWS navigation bar with links for 'Getting Started', 'Imported From Fir...', 'Addons', 'New Tab', 'Network Research...', 'IEEE/ACM Internat...', and 'Styles Archives -...'. The main content area shows the 'Amazon S3 > Buckets > ybawsbucket2022 > new-report.png' path. The object name 'new-report.png' is displayed with an 'Info' link. To the right are buttons for 'Copy S3 URI', 'Download', 'Open', and 'Object actions'. Below this, there are tabs for 'Properties' (which is selected), 'Permissions', and 'Versions'. The 'Object overview' section contains the following details:

Property	Value
Owner	awslabscOw92327t1543164743
AWS Region	US East (N. Virginia) us-east-1
Last modified	December 4, 2022, 21:12:01 (UTC+07:00)
Size	84.0 KB
Type	png
Key	<a href="https://ybawsbucket2022.s3.amazonaws.com/new-report.png">new-report.png</a>
S3 URI	<a href="s3://ybawsbucket2022/new-report.png">s3://ybawsbucket2022/new-report.png</a>
Amazon Resource Name (ARN)	<a href="arn:aws:s3:::ybawsbucket2022/new-report.png">arn:aws:s3:::ybawsbucket2022/new-report.png</a>
Entity tag (Etag)	<a href="#">75acf5a0dd2f6bdd67c36fa2748a1a19</a>
Object URL	<a href="https://ybawsbucket2022.s3.amazonaws.com/new-report.png">https://ybawsbucket2022.s3.amazonaws.com/new-report.png</a>

At the bottom, there are links for 'Feedback', 'Looking for language selection? Find it in the new Unified Settings', '© 2022, Amazon Web Services, Inc. or its affiliates.', 'Privacy', 'Terms', and 'Cookie preferences'.

# The new-report.png object now displays properly because it is publicly accessible

A screenshot of a Microsoft Excel spreadsheet titled "sample-report". The spreadsheet contains a single sheet with data starting from row 1. The columns are labeled A through H. The data includes:

	Service	Operation	UsageType	Resource	StartTime	EndTime	UsageValue
1	AmazonS3	HeadBucket	USW2-C3DataTransfer-Out-Bytes	lab-test-bucket-77	10/31/2020 0:00	12/31/2020 11:59	15309
2	AmazonS3	PutObject	USW2-C3DataTransfer-In-Bytes	admin-test-77	10/31/2020 0:00	12/31/2020 11:59	19032
3	AmazonS3	HeadBucket	USW2-Requests-Tier2	admin-test-77	10/31/2020 0:00	12/31/2020 11:59	128
4	AmazonS3	PutObjectForReplication	USW1-Requestst-SIA-Tier1	mybucket-98765	10/31/2020 0:00	12/31/2020 11:59	56888
5	AmazonS3	GetObjectFor Replication	USW1-USW2-AWS-In-Bytes	mybucket-98766	10/31/2020 0:00	12/31/2020 11:59	254587
6	AmazonS3	GetObjectFor Replication	USW2-C3DataTransfer-Out-Bytes	mybucket-98767	10/31/2020 0:00	12/31/2020 11:59	235
7	AmazonS3	HeadBucket	USW2-C3DataTransfer-In-Bytes	mybucket-98768	10/31/2020 0:00	12/31/2020 11:59	25589
8	AmazonS3	PutObject	USW2-Requests-Tier2	mybucket-98769	10/31/2020 0:00	12/31/2020 11:59	2348
9	AmazonS3	PutObjectForReplication	USW1-Requestst-SIA-Tier1	mybucket-98770	10/31/2020 0:00	12/31/2020 11:59	15309
10	AmazonS3	GetObjectFor Replication	USW1-USW2-AWS-In-Bytes	mybucket-98771	10/31/2020 0:00	12/31/2020 11:59	19032
11	AmazonS3	GetObjectFor Replication	USW2-C3DataTransfer-Out-Bytes	lab-example-bucket	10/31/2020 0:00	12/31/2020 11:59	128
12	AmazonS3	HeadBucket	USW2-C3DataTransfer-In-Bytes	lab-example-bucket	10/31/2020 0:00	12/31/2020 11:59	56888
13	AmazonS3	PutObject	USW2-Requests-Tier2	lab-example-bucket	10/31/2020 0:00	12/31/2020 11:59	254587
14	AmazonS3	PutObjectForReplication	USW1-Requestst-SIA-Tier1	lab-example-bucket	10/31/2020 0:00	12/31/2020 11:59	235
15	AmazonS3	GetObjectFor Replication	USW1-USW2-AWS-In-Bytes	lab-example-bucket	10/31/2020 0:00	12/31/2020 11:59	25589
16	AmazonS3	HeadBucket	USW2-C3DataTransfer-Out-Bytes				
17							
18							

The Excel interface shows various ribbon tabs like Home, Insert, Page Layout, etc., and a status bar at the bottom indicating "Ready" and "100%".



## Task 4: Testing connectivity from the EC2 instance

# On the Services menu, choose EC2

The screenshot shows a web browser window with the AWS Services menu open. The menu is titled "Compute" and lists several services under this category. The "EC2" service is highlighted with a yellow star icon and a tooltip "Virtual Servers in the Cloud". The URL in the browser's address bar is <https://us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1>.

Recently visited

Favorites

All services

Analytics

Application Integration

AR & VR

AWS Cost Management

Blockchain

Business Applications

Compute

Containers

Customer Enablement

Database

Developer Tools

End User Computing

Front-end Web & Mobile

Game Development

Internet of Things

Machine Learning

Compute

AWS App Runner

Batch

EC2

EC2 Image Builder

Elastic Beanstalk

Lambda

Lightsail

AWS Outposts

Serverless Application Repository

Download Open Object actions

https://us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1

© 2022, Amazon Web Services, Inc. or its affiliates.

Privacy Terms Cookie preferences

# Choose Instances (running)

The screenshot shows the AWS EC2 Management Dashboard for the US East (N. Virginia) Region. The left sidebar includes sections for New EC2 Experience, EC2 Dashboard, Instances (with sub-options like Instances, Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Scheduled Instances, Capacity Reservations), Images (AMIs, AMI Catalog), and Elastic Block Store (Volumes). The main content area displays the following statistics:

Category	Value
Instances (running)	1
Dedicated Hosts	0
Elastic IPs	0
Instances	1
Key pairs	1
Load balancers	0
Placement groups	0
Security groups	3
Snapshots	0
Volumes	1

A callout message encourages using the AWS Launch Wizard for Microsoft SQL Server Always On availability groups. The Service health section indicates that the service is operating normally. The Explore AWS section highlights Amazon GuardDuty Malware Protection and Get Up to 40% Better Price Performance.

Feedback: Looking for language selection? Find it in the new Unified Settings [Learn more](#)

© 2022, Amazon Web Services, Inc. or its affiliates. [Privacy](#) [Terms](#) [Cookie preferences](#)

# Select the check box for Bastion Host and choose Connect

The screenshot shows the AWS EC2 Management console interface. The left sidebar is collapsed, and the main area displays the 'Instances' page. A single instance, 'Bastion Host' with ID 'i-0ef5291aad5b56b2b', is listed and highlighted. The instance is in the 'Running' state, t3.micro type, with 2/2 checks passed. The 'Connect' button is visible in the top right of the main area. The bottom section provides detailed information about the selected instance.

**Instances (1/1) Info**

Find instance by attribute or tag (case-sensitive)

Instance state = running

Clear filters

Name: Bastion Host | Instance ID: i-0ef5291aad5b56b2b | Instance state: Running | Instance type: t3.micro | Status check: 2/2 checks passed | Alarm status: No alarms | Availability Zone: us-east-1a | Public IP: ec2-44-195-68-156.compute-1.amazonaws.com

**Instance: i-0ef5291aad5b56b2b (Bastion Host)**

**Details** Security Networking Storage Status checks Monitoring Tags

**Instance summary**

Instance ID i-0ef5291aad5b56b2b (Bastion Host)	Public IPv4 address 44.195.68.156   open address	Private IPv4 addresses 10.10.1.107
IPv6 address -	Instance state Running	Public IPv4 DNS ec2-44-195-68-156.compute-1.amazonaws.com   open address
Hostname type IP name: ip-10-10-1-107.ec2.internal	Private IP DNS name (IPv4 only) ip-10-10-1-107.ec2.internal	Elastic IP addresses
Answer private resource DNS name	Instance type	

Feedback Looking for language selection? Find it in the new Unified Settings [?](#)

© 2022, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

# Select the Session Manager tab for the connection method

The screenshot shows a web browser window with the URL [us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#ConnectToInstance:instanceId=i-0ef5291aad5b56b2b](https://us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#ConnectToInstance:instanceId=i-0ef5291aad5b56b2b). The browser tabs include "Home", "Lab 1 - Introduction to Amazon", and "Connect to instance | EC2 Man...". The main content area is titled "Connect to instance Info" and describes connecting to the instance i-0ef5291aad5b56b2b (Bastion Host) using EC2 Instance Connect, Session Manager, SSH client, or EC2 serial console. The "Session Manager" tab is highlighted in orange. Below it, the "Session Manager usage:" section lists several bullet points about its features. At the bottom right are "Cancel" and "Connect" buttons.

EC2 > Instances > i-0ef5291aad5b56b2b > Connect to instance

**Connect to instance Info**  
Connect to your instance i-0ef5291aad5b56b2b (Bastion Host) using any of these options

EC2 Instance Connect    **Session Manager**    SSH client    EC2 serial console

**Session Manager usage:**

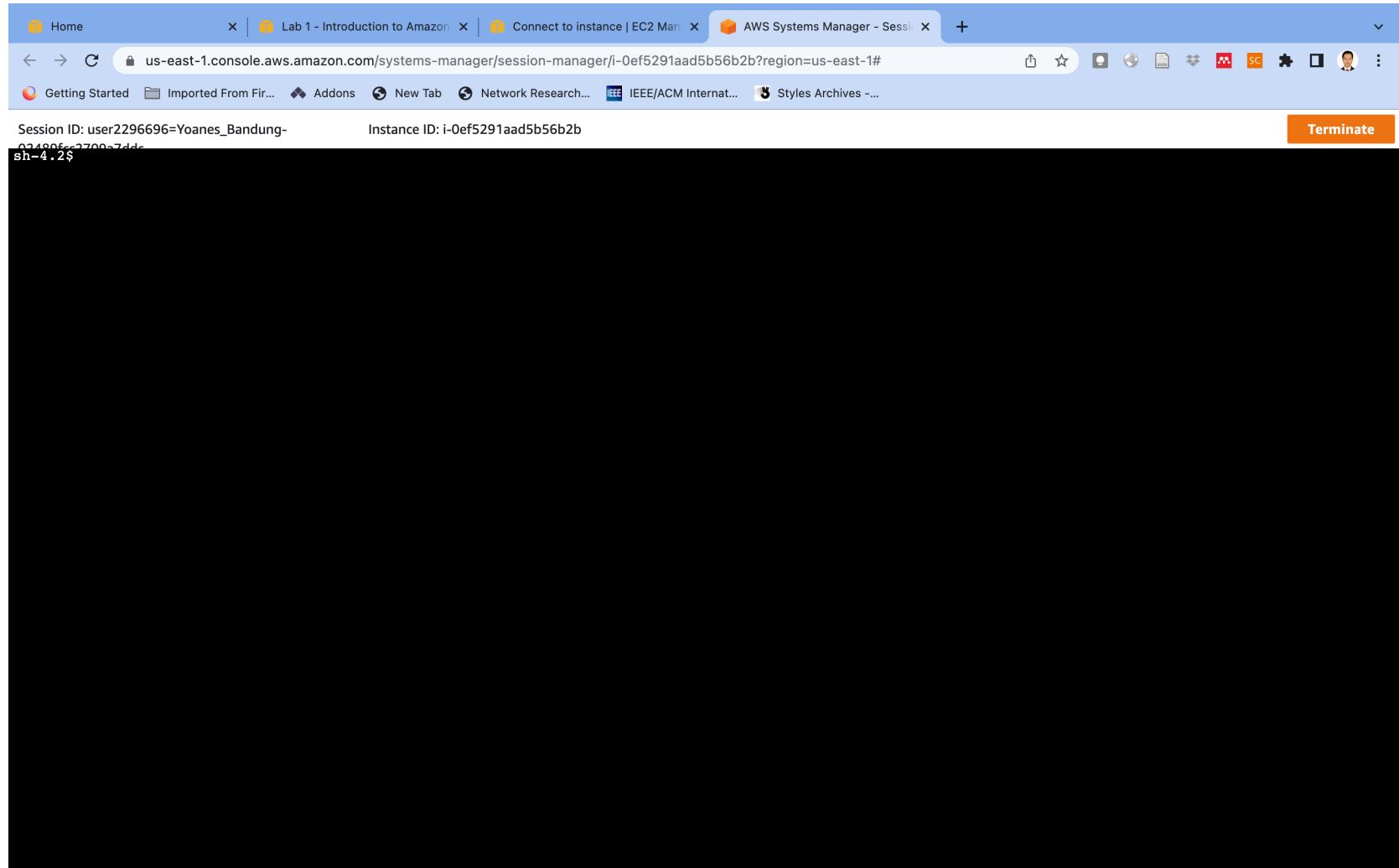
- Connect to your instance without SSH keys or a bastion host.
- Sessions are secured using an AWS Key Management Service key.
- You can log session commands and details in an Amazon S3 bucket or CloudWatch Logs log group.
- Configure sessions on the Session Manager [Preferences](#) page.

Cancel    **Connect**

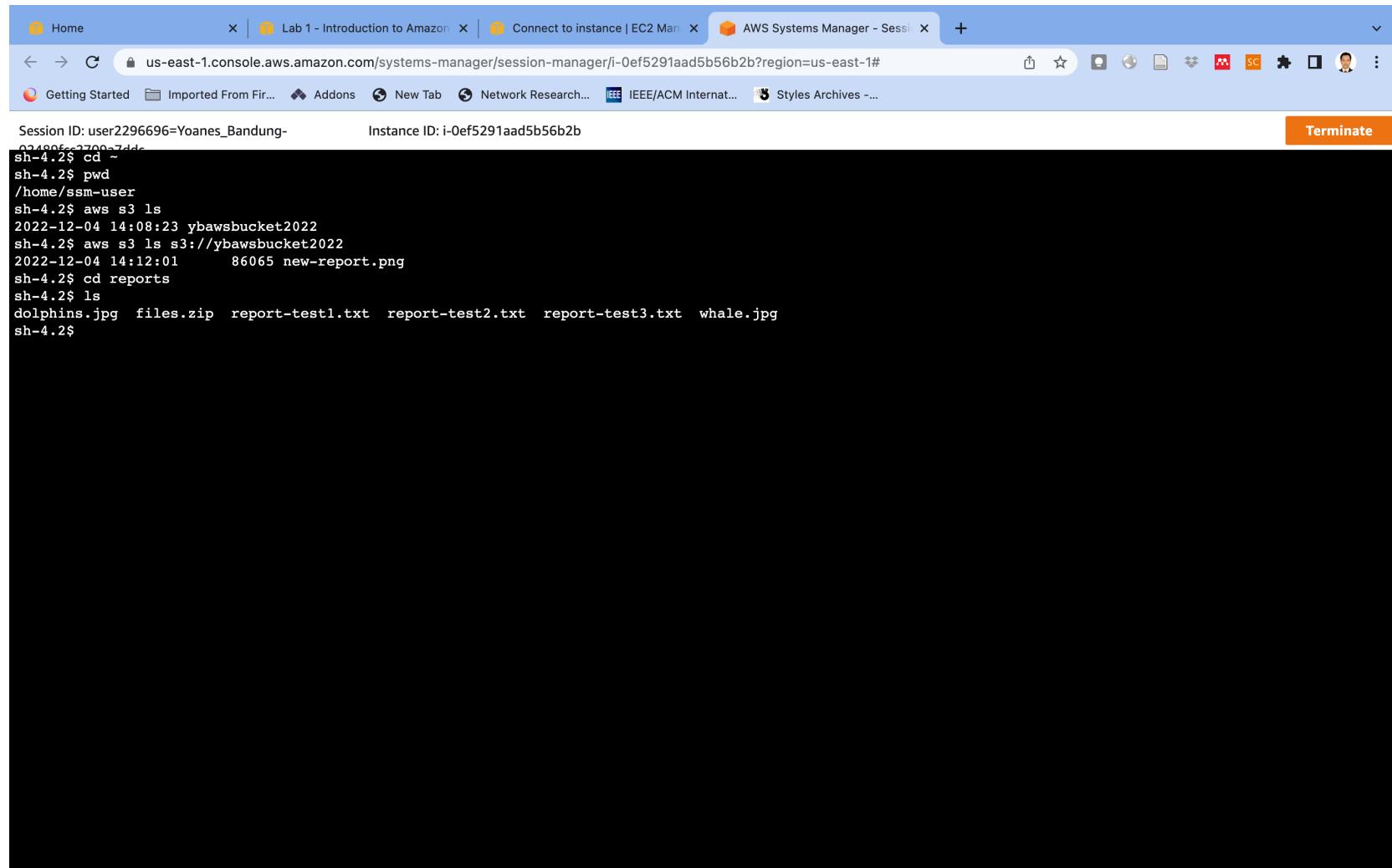
Feedback   Looking for language selection? Find it in the new Unified Settings [\[ \]](#)

© 2022, Amazon Web Services, Inc. or its affiliates.   [Privacy](#)   [Terms](#)   [Cookie preferences](#)

# A new browser tab or window opens with a connection to the bastion host instance



# Listing files

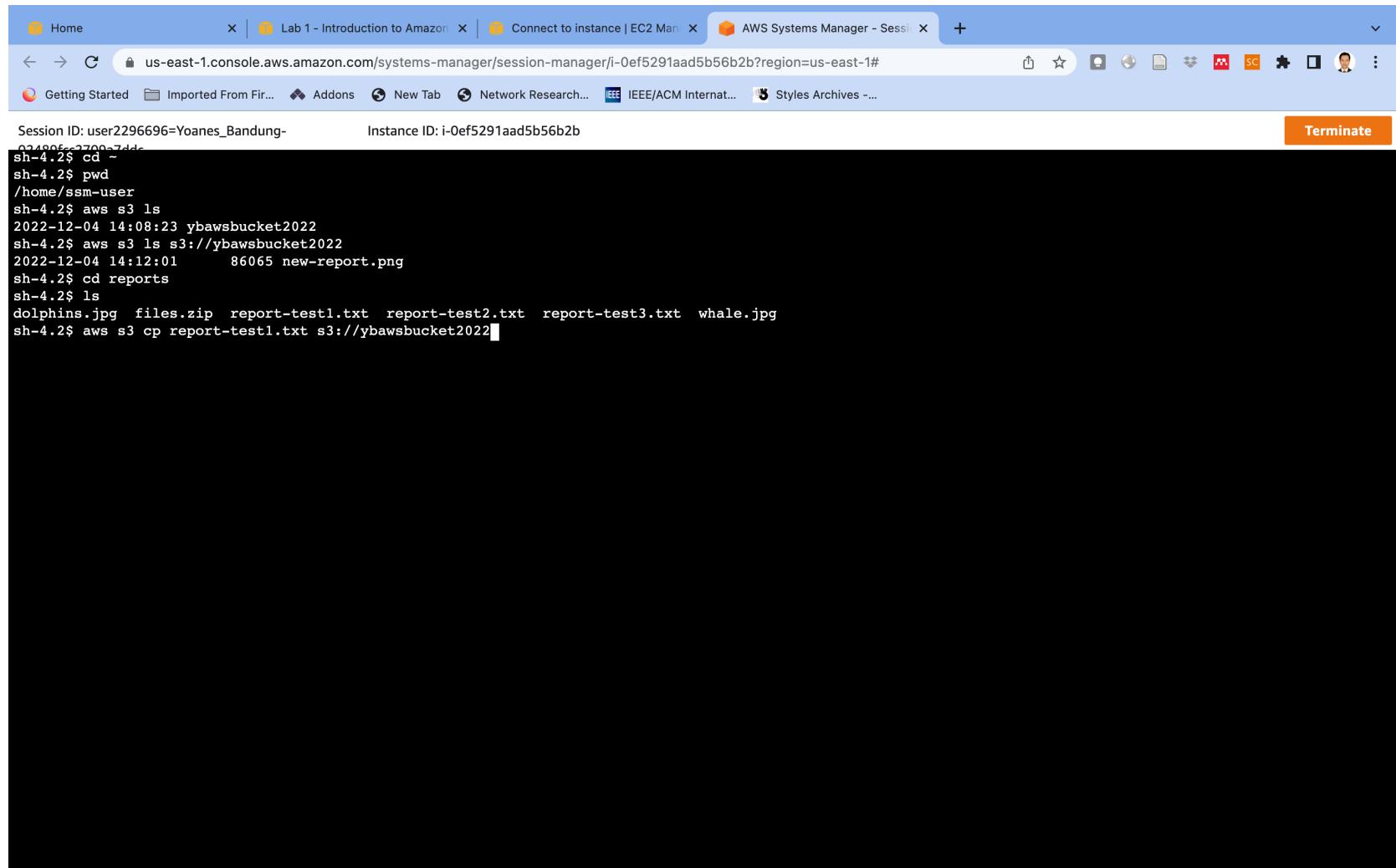


The screenshot shows a web browser window with the following details:

- Session ID:** user2296696=Yoanes\_Bandung
- Instance ID:** i-0ef5291aad5b56b2b
- Termination Status:** Pending (orange button)
- Terminal Output:**

```
sh-4.2$ cd ~
sh-4.2$ pwd
/home/ssm-user
sh-4.2$ aws s3 ls
2022-12-04 14:08:23    ybawsbucket2022
sh-4.2$ aws s3 ls s3://ybawsbucket2022
2022-12-04 14:12:01      86065 new-report.png
sh-4.2$ cd reports
sh-4.2$ ls
dolphins.jpg  files.zip  report-test1.txt  report-test2.txt  report-test3.txt  whale.jpg
sh-4.2$
```

# Copy a file to the S3 bucket

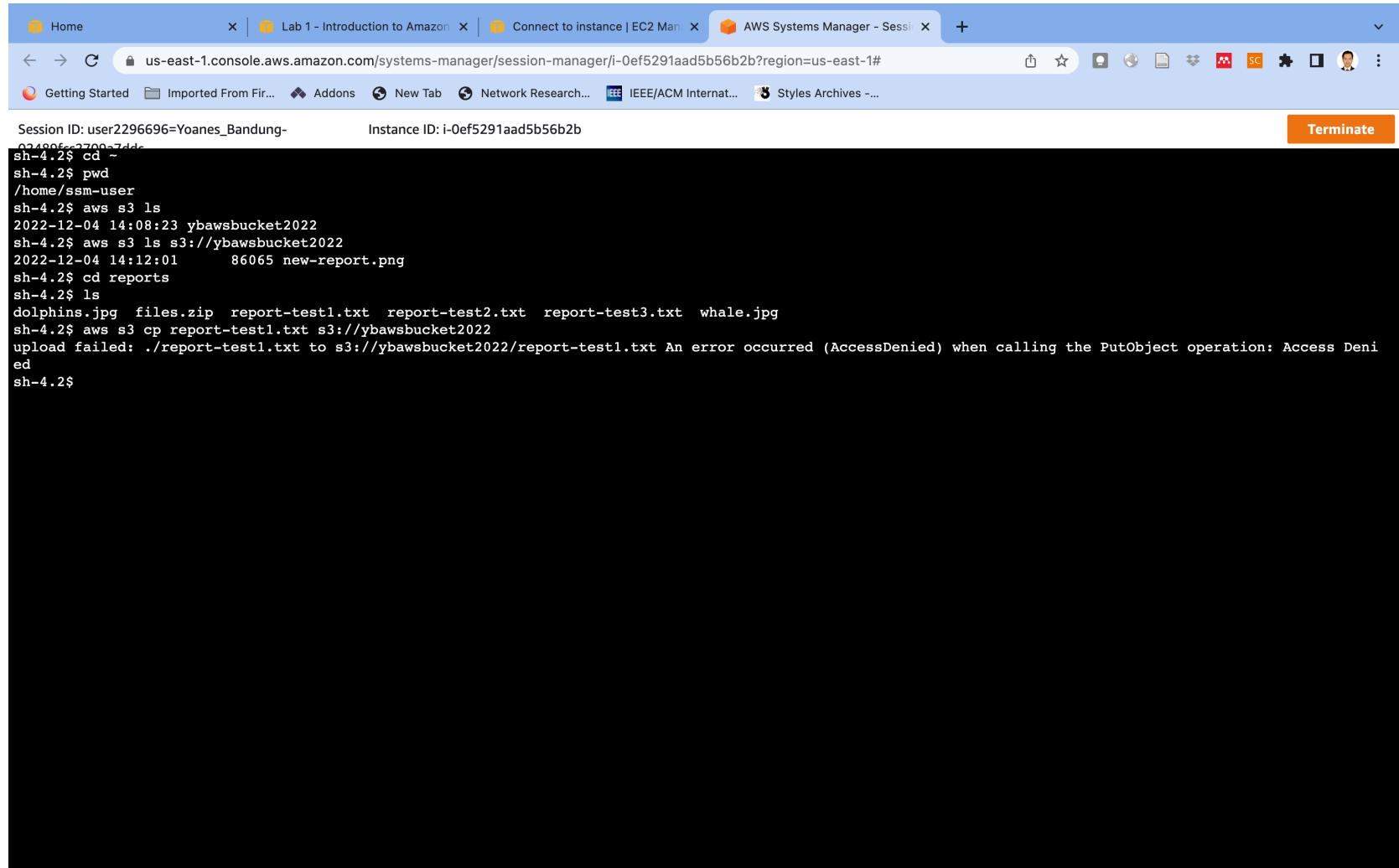


The screenshot shows a web browser window with the address bar pointing to `us-east-1.console.aws.amazon.com/systems-manager/session-manager/i-0ef5291aad5b56b2b?region=us-east-1#`. The main content area is a terminal session with the following text:

```
Session ID: user2296696=Yoanes_Bandung           Instance ID: i-0ef5291aad5b56b2b
sh-4.2$ cd ~
sh-4.2$ pwd
/home/ssm-user
sh-4.2$ aws s3 ls
2022-12-04 14:08:23  ybawsbucket2022
sh-4.2$ aws s3 ls s3://ybawsbucket2022
2022-12-04 14:12:01      86065 new-report.png
sh-4.2$ cd reports
sh-4.2$ ls
dolphins.jpg files.zip report-test1.txt report-test2.txt report-test3.txt whale.jpg
sh-4.2$ aws s3 cp report-test1.txt s3://ybawsbucket2022
```

A red box highlights the command `aws s3 cp report-test1.txt s3://ybawsbucket2022`. In the top right corner of the terminal window, there is a red button labeled "Terminate".

# The output indicates an upload failed error



A screenshot of a web browser window showing an AWS Systems Manager session terminal. The browser tabs include "Home", "Lab 1 - Introduction to Amazon", "Connect to instance | EC2 Man...", and "AWS Systems Manager - Session". The main content area shows a terminal session with the following output:

```
Session ID: user2296696=Yoanes_Bandung           Instance ID: i-0ef5291aad5b56b2b
sh-4.2$ cd ~
sh-4.2$ pwd
/home/ssm-user
sh-4.2$ aws s3 ls
2022-12-04 14:08:23  ybawsbucket2022
sh-4.2$ aws s3 ls s3://ybawsbucket2022
2022-12-04 14:12:01      86065 new-report.png
sh-4.2$ cd reports
sh-4.2$ ls
dolphins.jpg files.zip report-test1.txt report-test2.txt report-test3.txt whale.jpg
sh-4.2$ aws s3 cp report-test1.txt s3://ybawsbucket2022
upload failed: ./report-test1.txt to s3://ybawsbucket2022/report-test1.txt An error occurred (AccessDenied) when calling the PutObject operation: Access Denied
ed
sh-4.2$
```

The terminal session ends with an "Access Denied" error message when attempting to upload a file to S3.



## Task 5: Creating a bucket policy

## Task 5: Creating a bucket policy

---

- ▶ A bucket policy is a set of permissions associated with an S3 bucket. It is used to control access to an entire bucket or to specific directories within a bucket.
- ▶ In this task, you use the AWS Policy Generator to create a bucket policy to enable read and write access from the EC2 instance to the bucket so that your reporting application can successfully write to Amazon S3.

# Upload the sample-file.txt file

The screenshot shows a web browser window with the AWS S3 Management Console open. The URL in the address bar is `s3.console.aws.amazon.com/s3/upload/ybawsbucket2022?region=us-east-1`. The browser tabs include Home, Lab 1 - Introduction to Amazon, S3 Management Console, and AWS Systems Manager - Session.

The AWS navigation bar shows Services selected. A green success message at the top left says "Upload succeeded" with a link to "View details below".

A modal window titled "Upload: status" is displayed. It contains a message: "The information below will no longer be available after you navigate away from this page." Below this, the "Summary" section shows the destination as `s3://ybawsbucket2022`, with 1 file uploaded successfully (113.0 B) and 0 files failed (0 B).

The "Files and folders" tab is selected in the main content area. It displays a table with one row for "sample-file.txt". The table columns are Name, Folder, Type, Size, Status, and Error. The file details are: Name: sample-file.txt, Folder: -, Type: text/plain, Size: 113.0 B, Status: Succeeded, and Error: -.

At the bottom, there is a feedback message: "Looking for language selection? Find it in the new Unified Settings." and copyright information: "© 2022, Amazon Web Services, Inc. or its affiliates." followed by links for Privacy, Terms, and Cookie preferences.

Name	Folder	Type	Size	Status	Error
sample-file.txt	-	text/plain	113.0 B	Succeeded	-

# Two objects on the bucket

The screenshot shows the AWS S3 console interface. At the top, there are several tabs open in a browser: "Lab 1 - Introduction to Amazon", "ybawsbucket2022 - S3 bucket", "AWS Systems Manager - Session", and "new-report.png (1045x602)". Below the tabs, the URL in the address bar is `s3.console.aws.amazon.com/s3/buckets/ybawsbucket2022?region=us-east-1&tab=objects`. The main navigation bar includes links for "Getting Started", "Imported From Fir...", "Addons", "New Tab", "Network Research...", "IEEE/ACM Internat...", and "Styles Archives -...". The "Services" dropdown is set to "Amazon S3". A search bar contains the placeholder "[Option+S]". On the right side of the header, there are icons for "Global", "voclabs/user2296696=Yoanes\_Bandung @ 7297-2398-8068", and a user profile icon.

The page title is "ybawsbucket2022" with a "Info" link. Below the title, there are tabs for "Objects" (which is selected), "Properties", "Permissions", "Metrics", "Management", and "Access Points".

The "Objects" section displays a list of 2 items:

Name	Type	Last modified	Size	Storage class
new-report.png	png	December 7, 2022, 08:50:08 (UTC+07:00)	84.0 KB	Standard
sample-file.txt	txt	December 7, 2022, 09:00:54 (UTC+07:00)	113.0 B	Standard

Below the table are buttons for "Actions" (with options like Copy S3 URI, Copy URL, Download, Open, Delete, Create folder, and Upload), a search bar "Find objects by prefix", and navigation controls (less than, 1, greater than, and a gear icon).

At the bottom of the page, there is a footer with links for "Feedback", "Looking for language selection? Find it in the new Unified Settings", "© 2022, Amazon Web Services, Inc. or its affiliates.", "Privacy", "Terms", and "Cookie preferences".

# Locate and copy the Object URL link

The screenshot shows the AWS S3 console interface. The top navigation bar has tabs for 'Lab 1 - Introduction to Amazon' (active), 'ybawsbucket2022 - S3 bucket' (active), 'AWS Systems Manager - Session' (inactive), and 'new-report.png (1045x602)' (inactive). Below the tabs is a toolbar with icons for Getting Started, Imported From F..., Addons, New Tab, Network Research..., IEEE/ACM Internat..., Styles Archives..., and a user profile.

The main navigation bar shows 'Services' selected, followed by 'Search' and '[Option+S]'. On the right, it displays the user information: 'voclabs/user2296696=Yoanes\_Bandung @ 7297-2398-8068'.

The breadcrumb navigation path is 'Amazon S3 > Buckets > ybawsbucket2022 > sample-file.txt'. The file name 'sample-file.txt' is highlighted in blue, and there is an 'Info' link next to it.

Below the file name are four buttons: 'Copy S3 URI', 'Download', 'Open', and 'Object actions'.

The 'Properties' tab is selected, showing the following details:

Property	Value
Owner	awslabsc0w92327t1543164743
AWS Region	US East (N. Virginia) us-east-1
Last modified	December 7, 2022, 09:00:54 (UTC+07:00)
Size	113.0 B
Type	txt
Key	sample-file.txt

On the right side of the properties table, there are four links:

- S3 URI: <s3://ybawsbucket2022/sample-file.txt>
- Amazon Resource Name (ARN): <arn:aws:s3:::ybawsbucket2022/sample-file.txt>
- Entity tag (Etag): [4a0b2a536384728d06b8a9c5ceae0581](#)
- Object URL: <https://ybawsbucket2022.s3.amazonaws.com/sample-file.txt>

At the bottom of the page, there are links for 'Feedback', 'Looking for language selection? Find it in the new Unified Settings', '© 2022, Amazon Web Services, Inc. or its affiliates.', 'Privacy', 'Terms', and 'Cookie preferences'.

# Browser displays an Access Denied message

The screenshot shows a web browser window with the following details:

- Tab Bar:** Lab 1 - Introduction to Amazon, ybawsbucket2022 - S3 bucket, AWS Systems Manager - Session, new-report.png (1045x602), https://ybawsbucket2022.s3.amazonaws.com/sample-file.txt
- Address Bar:** https://ybawsbucket2022.s3.amazonaws.com/sample-file.txt
- Toolbar:** Getting Started, Imported From Fir..., Addons, New Tab, Network Research..., IEEE/ACM Internat..., Styles Archives -...
- Content Area:** This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
<Error>
  <Code>AccessDenied</Code>
  <Message>Access Denied</Message>
  <RequestId>7QXK7Y8N5JWC4EV</RequestId>
  <HostId>vy38Cv7ed3DYUiTjGgkD4ZGUfqz2EHTdi5v0f52NaEYKOBRKTPNRok98fuDIKFWK1wVVV7/hkPo=</HostId>
</Error>
```

# Select Services and select IAM

The screenshot shows the AWS Management Console interface. The top navigation bar includes tabs for Home, Lab 1 - Introduction to Amazon S3, S3 Management Console, ybawsbucket2022 - S3 bucket, AWS Systems Manager, and https://ybawsbucket2022.s3.amazonaws.com. Below the navigation bar is the AWS Services menu, which lists various AWS services like Customer Enablement, Database, Developer Tools, End User Computing, Front-end Web & Mobile, Game Development, Internet of Things, Machine Learning, Management & Governance, Media Services, Migration & Transfer, Networking & Content Delivery, Quantum Technologies, Robotics, Satellite, Security, Identity, & Compliance, and Storage. A search bar is located above the services list. The main content area displays the IAM Identity Center page, which is the successor to AWS Single Sign-On. It features sections for IAM Identity Center (Manage workforce user access), Amazon Inspector (Continual vulnerability management at scale), Key Management Service (Securely Generate and Manage AWS Encryption Keys), Amazon Macie (Amazon Macie classifies and secures your business-critical content), AWS Network Firewall (AWS Network Firewall), and Resource Access Manager (Share AWS resources with other accounts or AWS Organizations). On the right side of the main content area, there is a green progress bar indicating a task status. At the bottom of the screen, the URL https://us-east-1.console.aws.amazon.com/iam/home?region=us-east-1 is visible, along with links for Privacy, Terms, and Cookie preferences.

# Select Services and select IAM

The screenshot shows the AWS IAM Management Console dashboard. The left sidebar contains navigation links for Identity and Access Management (IAM), Access management, Access reports, and Feedback. The main content area includes sections for Security recommendations, IAM resources (with counts: User groups 1, Users 0, Roles 15, Policies 1, Identity providers 0), What's new (with a list of recent updates), and AWS Account details (Account ID: 729723988068, Account Alias: 729723988068, Sign-in URL: https://729723988068.signin.amazonaws.com/console). The bottom right corner features a "Show All" button.

**Identity and Access Management (IAM)**

**IAM dashboard**

**Security recommendations** 1

**Add MFA for root user**  
Sign in as the root user (or contact your administrator) and register a multi-factor authentication (MFA) device for the root user to improve security for this account.

**IAM resources**

User groups	Users	Roles	Policies	Identity providers
1	0	15	1	0

**What's new**

Updates for features in IAM

- IAM Access Analyzer findings now support Amazon SNS topics and five other AWS resource types to help you identify public and cross-account access. 1 month ago
- IAM Access Analyzer now reviews your AWS CloudTrail history to identify actions used across 140 AWS services and generates fine-grained policies. 1 month ago
- IAM Access Analyzer makes it easier to author and validate role trust policies. 2 months ago
- AWS Lambda announces support for a new IAM condition key, lambda:SourceFunctionArn. 5 months ago

**AWS Account**

Account ID: 729723988068  
Account Alias: 729723988068 [Create](#)  
Sign-in URL: <https://729723988068.signin.amazonaws.com/console>

**Tools**

[Policy simulator](#)  
The simulator evaluates the policies that you choose and determines the effective permissions for each of the actions that you specify.

[Web identity federation playground](#)  
Authenticate yourself to any of the supported web identity providers, see the requests and responses, obtain a set of temporary security credentials, and make calls to the

Feedback Looking for language selection? Find it in the new Unified Settings [?](#)

© 2022, Amazon Web Services, Inc. or its affiliates. [Privacy](#) [Terms](#) [Cookie preferences](#)

sample-file.txt [^](#) [Show All](#) [X](#)

# In the Search field, enter EC2InstanceProfileRole

The screenshot shows the AWS IAM Management Console interface. The left sidebar is collapsed, and the main area displays the 'Roles' page. A search bar at the top contains the query 'EC2InstanceProfileRole'. Below the search bar, the results show one match: 'EC2InstanceProfileRole' under the 'Role name' column, with 'AWS Service: ec2' listed under 'Trusted entities'. The timestamp '15 minutes ago' is also visible. At the bottom of the page, there are three sections: 'Access AWS from your non AWS workloads', 'X.509 Standard', and 'Temporary credentials'.

Identity and Access Management (IAM)

Search IAM

Dashboard

Access management

- User groups
- Users
- Roles**
- Policies
- Identity providers
- Account settings

Access reports

- Access analyzer
- Archive rules
- Analyzers
- Settings
- Credential report
- Organization activity
- Service control policies (SCPs)

Feedback Looking for language selection? Find it in the new Unified Settings [?](#)

© 2022, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

sample-file.txt [Show All](#) [X](#)

Screenshot of the AWS IAM Management Console showing the EC2InstanceProfileRole details page.

The browser tab bar shows multiple tabs including "Lab 1 - Introduction to Ama", "IAM Management Console", "ybawsbucket2022 - S3 bu", "AWS Systems Manager - S", and "https://ybawsbucket2022.s".

The AWS navigation bar includes "Home", "Services", "Search", "[Option+S]", "Global", and user information "voclabs/user2296696=Yoanes\_Bandung @ 7297-2398-8068".

The left sidebar under "Access management" has "Roles" selected, while other options like "User groups", "Users", "Policies", "Identity providers", and "Account settings" are visible.

The main content area shows the "EC2InstanceProfileRole" summary. Key details include:

- Creation date:** December 04, 2022, 20:56 (UTC+07:00)
- Last activity:** 16 minutes ago
- ARN:** arn:aws:iam::729723988068:role/EC2InstanceProfileRole
- Instance profile ARN:** arn:aws:iam::729723988068:instance-profile/EC2InstanceProfile
- Maximum session duration:** 1 hour

The "Permissions" tab is active, showing two attached policies:

- ReadOnlyAccess**: AWS managed policy. Description: Provides read-only access to.
- AmazonSSMManagedInstanceCore**: AWS managed policy. Description: The policy for Amazon EC2 R.

Other tabs available in the permissions section include "Trust relationships", "Tags (1)", "Access Advisor", and "Revoke sessions".

At the bottom, there are links for "Feedback", "Looking for language selection? Find it in the new Unified Settings", "© 2022, Amazon Web Services, Inc. or its affiliates.", "Privacy", "Terms", and "Cookie preferences".

# Select EC2InstanceProfileRole

The screenshot shows the AWS IAM Management Console with the URL <https://us-east-1.console.aws.amazon.com/iamv2/home?region=us-east-1#/roles/details/EC2InstanceProfileRole?section=permissions>. The page displays the details of the 'EC2InstanceProfileRole'.

**Summary**

Creation date	ARN	Instance profile ARN
December 04, 2022, 20:56 (UTC+07:00)	<a href="#">arn:aws:iam::729723988068:role/EC2InstanceProfileRole</a>	<a href="#">arn:aws:iam::729723988068:instance-profile/EC2InstanceProfile</a>
Last activity	Maximum session duration	
<a href="#">16 minutes ago</a>	1 hour	

**Permissions**    Trust relationships    Tags (1)    Access Advisor    Revoke sessions

**Permissions policies (2)** [Info](#)  
You can attach up to 10 managed policies.

Policy name	Type	Description
<a href="#">ReadOnlyAccess</a>	AWS managed	Provides read-only access to
<a href="#">AmazonSSMManagedInstanceCore</a>	AWS managed	The policy for Amazon EC2 R

Feedback Looking for language selection? Find it in the new Unified Settings [Show All](#) [x](#)

© 2022, Amazon Web Services, Inc. or its affiliates. [Privacy](#) [Terms](#) [Cookie preferences](#)

Save the Role ARN that the EC2 instance uses to connect to Amazon S3

---

arn:aws:iam::729723988068:role/EC2InstanceProfileRole

# Edit bucket policy

The screenshot shows the AWS S3 'Edit bucket policy' page. At the top, the browser address bar displays the URL: `s3.console.aws.amazon.com/s3/bucket/ybawsbucket2022/property/policy/edit?region=us-east-1`. The AWS navigation bar includes links for Getting Started, Imported From Fir..., Addons, New Tab, Network Research..., IEEE/ACM Internat..., Styles Archives..., and a user profile for 'voclabs/user2296696=Yoanes\_Bandung @ 7297-2398-8068'. The main content area shows the 'Edit bucket policy' interface. On the left, a sidebar lists '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' (with 'Dashboards' and 'AWS Organizations settings' sub-options), 'Feature spotlight', and 'AWS Marketplace for S3'. A green notification bubble says 'Bucket ARN copied'. The central panel has a 'Bucket policy' section with 'Policy examples' and 'Policy generator' buttons, and a note about bucket policies not applying to objects owned by other accounts. Below this is a 'Policy' section showing a single statement with the ARN `arn:aws:s3:::ybawsbucket2022`. To the right is an 'Edit statement' panel with a 'Select a statement' section and a 'Add new statement' button.

Lab 1 - Introduction to Amazon X ybawsbucket2022 - S3 bucket X AWS Systems Manager - Session X new-report.png (1045x602) X https://ybawsbucket2022.s3.amazonaws.com/ X +

Getting Started Imported From Fir... Addons New Tab Network Research... IEEE/ACM Internat... Styles Archives...

aws Services Search [Option+S] Global v voclabs/user2296696=Yoanes\_Bandung @ 7297-2398-8068 ▾

Amazon S3 Buckets Edit bucket policy

**Bucket policy**

The bucket policy, written in JSON, provides access to the objects stored in the bucket. Bucket policies don't apply to objects owned by other accounts. [Learn more](#)

Policy examples Policy generator

Bucket ARN copied

arn:aws:s3:::ybawsbucket2022

**Policy**

1

**Edit statement**

Select a statement

Select an existing statement in the policy or add a new statement.

+ Add new statement

Feedback Looking for language selection? Find it in the new Unified Settings

© 2022, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

# Save the Bucket ARN

---

- ▶ arn:aws:s3:::ybawsbucket2022

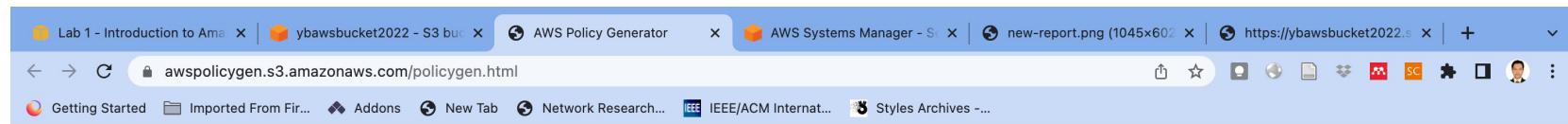
# Return to the S3 Management Console, Choose the reportbucket

The screenshot shows the AWS S3 Management Console with the following details:

- Left sidebar:** Shows the navigation menu with "Amazon S3" selected. Other options include "Buckets", "Storage Lens", "Feature spotlight", and "AWS Marketplace for S3".
- Permissions overview:** A summary section stating "Access Objects can be public".
- Block public access (bucket settings):** A section explaining that public access is granted through ACLs, bucket policies, or access point policies. It includes a status indicator "Off" and a link to "Edit" settings.
- Bucket policy:** A section explaining that the bucket policy provides access to objects stored in the bucket. It includes a status indicator "No policy to display.", an "Edit" button, a "Delete" button, and a "Copy" button.
- Bottom footer:** Includes links for "Feedback", "Looking for language selection? Find it in the new Unified Settings", "© 2022, Amazon Web Services, Inc. or its affiliates.", "Privacy", "Terms", and "Cookie preferences".

# Choose Policy generator

The screenshot shows the AWS S3 console with the URL <https://s3.console.aws.amazon.com/s3/bucket/ybawsbucket2022/property/policy/edit?region=us-east-1>. The left sidebar is titled "Amazon S3" and includes sections for Buckets, Storage Lens, and AWS Marketplace for S3. The main content area is titled "Edit bucket policy" and shows the "Bucket policy" section. It features two buttons: "Policy examples" and "Policy generator". Below these are fields for "Bucket ARN" (arn:aws:s3:::ybawsbucket2022) and "Policy". The "Policy" section contains a numbered item "1". To the right, there is a "Select a statement" dropdown and a button "+ Add new statement". The bottom of the page includes standard AWS footer links: Feedback, Looking for language selection? Find it in the new Unified Settings, © 2022, Amazon Web Services, Inc. or its affiliates., Privacy, Terms, and Cookie preferences.



## AWS Policy Generator

The AWS Policy Generator is a tool that enables you to create policies that control access to Amazon Web Services (AWS) products and resources. For more information about creating policies, see [key concepts in Using AWS Identity and Access Management](#). Here are [sample policies](#).

### Step 1: Select Policy Type

A Policy is a container for permissions. The different types of policies you can create are an [IAM Policy](#), an [S3 Bucket Policy](#), an [SNS Topic Policy](#), a [VPC Endpoint Policy](#), and an [SQS Queue Policy](#).

Select Type of Policy

### Step 2: Add Statement(s)

A statement is the formal description of a single permission. See [a description of elements](#) that you can use in statements.

Effect  Allow  Deny

Principal

Use a comma to separate multiple values.

AWS Service   All Services ('\*')

Use multiple statements to add permissions for more than one service.

Actions   All Actions ('\*')

Amazon Resource Name (ARN)

ARN should follow the following format: arn:aws:s3:::\${BucketName}/\${KeyName}.  
Use a comma to separate multiple values.

Add Conditions (Optional)

# Choose Add Statement

The screenshot shows a browser window with multiple tabs open. The active tab is titled "awspolicygen.s3.amazonaws.com/policygen.html". The page content is the "AWS Policy Generator" tool. It includes fields for "Principal" (with placeholder text "Use a comma to separate multiple values."), "AWS Service" (set to "Amazon S3" with a dropdown menu and a checkbox for "All Services ('\*'")), "Actions" (a dropdown menu with "All Actions ('\*')"), and "Amazon Resource Name (ARN)" (with placeholder text "ARN should follow the following format: arn:aws:s3:::\${BucketName}/\${KeyName}. Use a comma to separate multiple values."). Below these fields is a section titled "Add Conditions (Optional)" with an "Add Statement" button.

You added the following statements. Click the button below to Generate a policy.

Principal(s)	Effect	Action	Resource	Conditions
• arn:aws:iam::729723988068:role/EC2InstanceProfileRole	Allow	• s3:GetObject • s3:PutObject	*	None

## Step 3: Generate Policy

A *policy* is a document (written in the [Access Policy Language](#)) that acts as a container for one or more statements.

[Generate Policy](#)   [Start Over](#)

This AWS Policy Generator is provided for informational purposes only, you are still responsible for your use of Amazon Web Services technologies and ensuring that your use is in compliance with all applicable terms and conditions. This AWS Policy Generator is provided **as is** without warranty of any kind, whether express, implied, or statutory. This AWS Policy Generator does not modify the applicable terms and conditions governing your use of Amazon Web Services technologies.

©2010, Amazon Web Services LLC or its affiliates. All rights reserved.

An [amazon.com](#) company

# Generate Policy

The screenshot shows a browser window with multiple tabs open, including "Lab 1 - Introduction to Ama...", "ybausbucket2022 - S3 bu...", "AWS Policy Generator", "AWS Systems Manager - S...", "new-report.png (1045x602)", and "https://ybausbucket2022.s...". The main content is the "awspolicygen.s3.amazonaws.com/policygen.html" page.

The "Principal" field is empty. The "AWS Service" dropdown is set to "Amazon S3" and has a checked checkbox for "All Services ('\*')". The "Actions" dropdown is set to "-- Select Actions --" and has a checked checkbox for "All Actions ('\*')".

A modal dialog titled "Policy JSON Document" is displayed, containing the following JSON policy:

```
{
  "Id": "Policy1670379157705",
  "Version": "2012-10-17",
  "Statement": [
    {
      "Sid": "Stmt1670379138210",
      "Action": [
        "s3:GetObject",
        "s3:PutObject"
      ],
      "Effect": "Allow",
      "Resource": "*",
      "Principal": {
        "AWS": [
          "arn:aws:iam::729723988068:role/EC2InstanceProfileRole"
        ]
      }
    }
  ]
}
```

At the bottom of the modal is a "Close" button. Below the modal, a footer note reads:

This AWS Policy Generator is provided for informational purposes only, you are still responsible for your use of Amazon Web Services technologies and ensuring that your use is in compliance with all applicable terms and conditions. This AWS Policy Generator is provided **as is** without warranty of any kind, whether express, implied, or statutory. This AWS Policy Generator does not modify the applicable terms and conditions governing your use of Amazon Web Services technologies.

©2010, Amazon Web Services LLC or its affiliates. All rights reserved.  
An [amazon.com](#) company

# Copy the policy to editor

The screenshot shows the AWS S3 Bucket policy editor interface. On the left, there's a sidebar with navigation links like 'Buckets', 'Access Points', etc. The main area has tabs for 'Bucket policy' and 'Object policy'. The 'Bucket policy' tab is active, showing a JSON policy document. The policy document is as follows:

```
1  {
2   "Id": "Policy1670379157705",
3   "Version": "2012-10-17",
4   "Statement": [
5     {
6       "Sid": "Stmt1670379138210",
7       "Action": [
8         "s3:GetObject",
9         "s3:PutObject"
10      ],
11      "Effect": "Allow",
12      "Resource": "*",
13      "Principal": {
14        "AWS": [
15          "arn:aws:iam::729723988068:role/EC2InstanceProfileRole"
16        ]
17      }
18    }
19  ]
20 }
```

To the right of the policy, there's an 'Edit statement' panel with a 'Select a statement' dropdown and a 'Add new statement' button.

**Feedback** Looking for language selection? Find it in the new Unified Settings [\[ \]](#)

© 2022, Amazon Web Services, Inc. or its affiliates. [Privacy](#) [Terms](#) [Cookie preferences](#)

# Replace \* with Bucket ARN

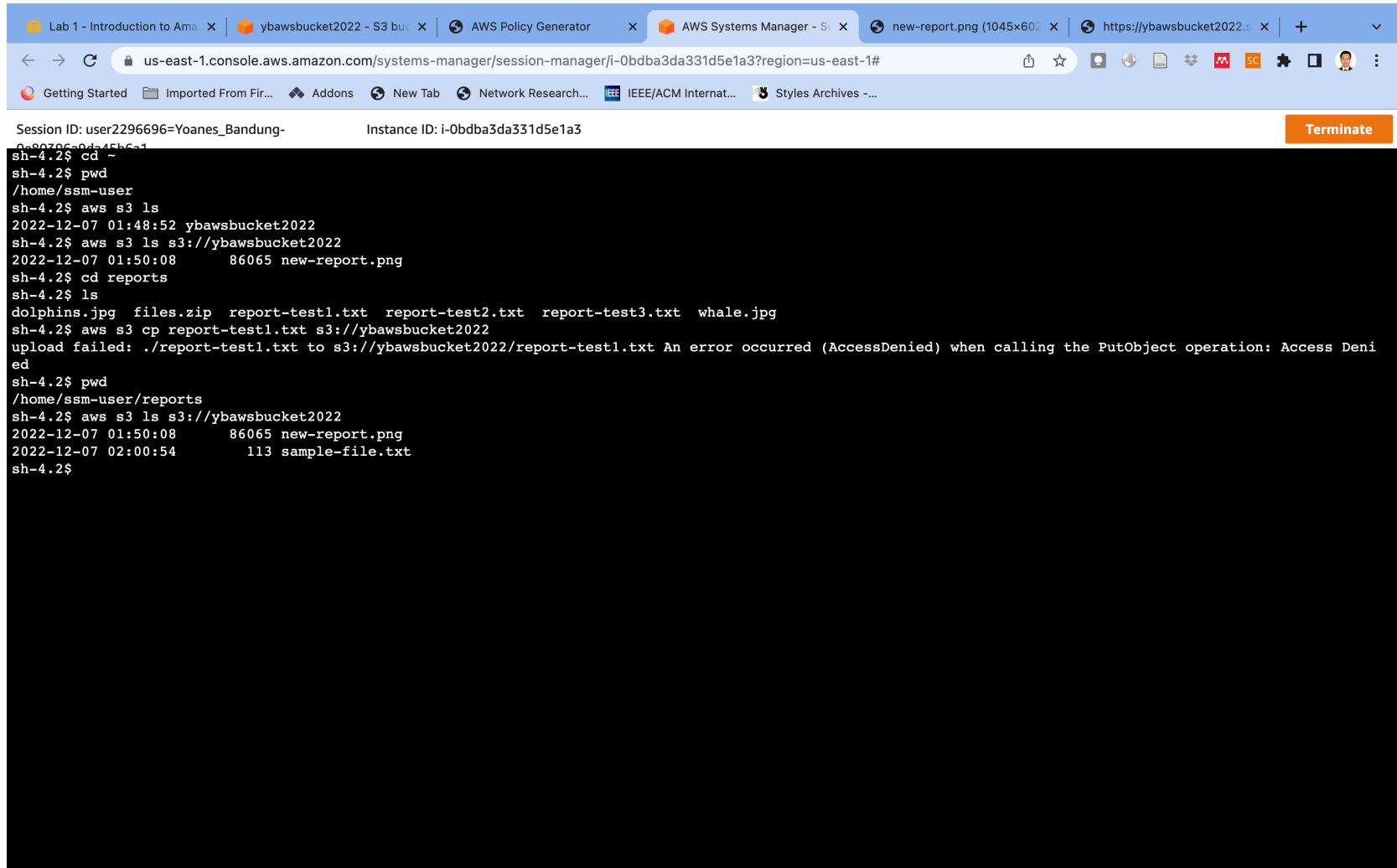
The screenshot shows the AWS S3 'Edit bucket policy' interface. On the left, a sidebar lists various AWS services like Buckets, Storage Lens, and Marketplace. The main area displays a JSON policy document with a cursor on line 12, which contains a 'Principal' entry. A context menu is open over this entry, showing options to 'Edit statement' and 'Remove'. The 'Edit statement' option is highlighted. To the right of the policy editor, there's a sidebar with sections for 'Included' (S3) and 'Available' services (AMP, API Gateway, API Gateway V2, Access Analyzer, Account).

```
1  {
2    "Id": "Policy1670379157705",
3    "Version": "2012-10-17",
4    "Statement": [
5      {
6        "Sid": "Stmt1670379138210",
7        "Action": [
8          "s3:GetObject",
9          "s3:PutObject"
10        ],
11        "Effect": "Allow",
12        "Resource": "arn:aws:s3:::ybawsbucket2022/*",
13        "Principal": [
14          {
15            "AWS": [
16              "arn:aws:iam::729723988068:role/EC2InstanceProfileRole"
17            ]
18          }
19        ]
20    }
```

Feedback Looking for language selection? Find it in the new Unified Settings [Edit](#)

© 2022, Amazon Web Services, Inc. or its affiliates. [Privacy](#) [Terms](#) [Cookie preferences](#)

# Return to the AWS Systems Manager (Systems Manager) window



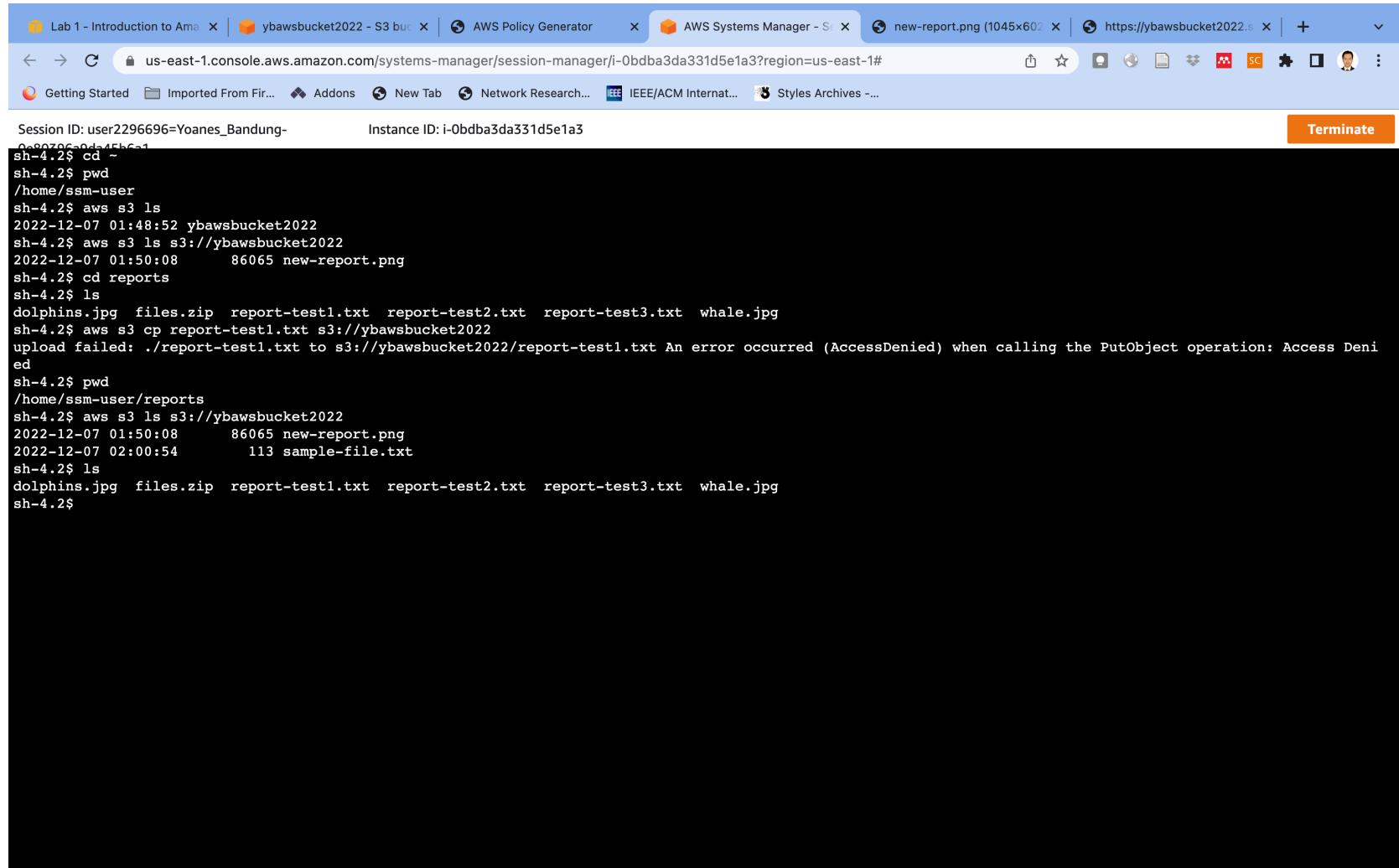
The screenshot shows a web browser window with multiple tabs open. The active tab is titled "AWS Systems Manager - Session Manager". The URL in the address bar is "us-east-1.console.aws.amazon.com/systems-manager/session-manager/i-0bdba3da331d5e1a3?region=us-east-1#". The browser interface includes a toolbar with various icons and a menu bar at the top.

Session ID: user2296696=Yoanes\_Bandung      Instance ID: i-0bdba3da331d5e1a3

sh-4.2\$ cd ~  
sh-4.2\$ pwd  
/home/ssm-user  
sh-4.2\$ aws s3 ls  
2022-12-07 01:48:52 ybawsbucket2022  
sh-4.2\$ aws s3 ls s3://ybawsbucket2022  
2022-12-07 01:50:08 86065 new-report.png  
sh-4.2\$ cd reports  
sh-4.2\$ ls  
dolphins.jpg files.zip report-test1.txt report-test2.txt report-test3.txt whale.jpg  
sh-4.2\$ aws s3 cp report-test1.txt s3://ybawsbucket2022  
upload failed: ./report-test1.txt to s3://ybawsbucket2022/report-test1.txt An error occurred (AccessDenied) when calling the PutObject operation: Access Denied  
sh-4.2\$ pwd  
/home/ssm-user/reports  
sh-4.2\$ aws s3 ls s3://ybawsbucket2022  
2022-12-07 01:50:08 86065 new-report.png  
2022-12-07 02:00:54 113 sample-file.txt  
sh-4.2\$

A "Terminate" button is visible in the top right corner of the terminal window.

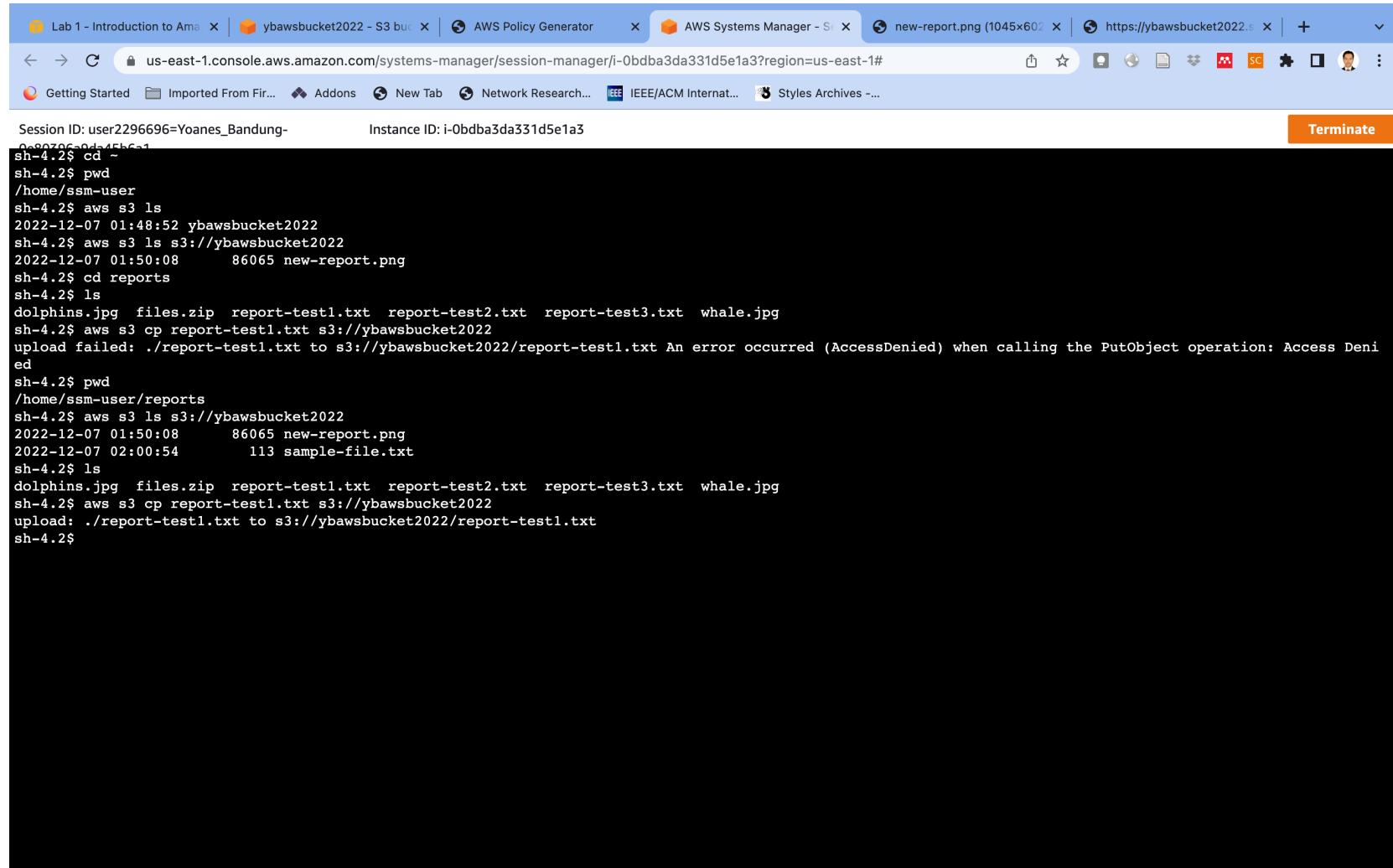
# Listing files



The screenshot shows a web browser window with multiple tabs open. The active tab is titled "aws s3 ls" and displays a terminal session on an AWS Systems Manager instance. The session ID is user2296696=Yoanes\_Bandung and the instance ID is i-0bdba3da331d5e1a3. The terminal output shows the user navigating through their home directory and listing files in an S3 bucket named "ybawsbucket2022". A command to copy a file from S3 to the instance failed due to Access Denied. The session ends with a "Terminate" button.

```
Session ID: user2296696=Yoanes_Bandung           Instance ID: i-0bdba3da331d5e1a3
sh-4.2$ cd ~
sh-4.2$ pwd
/home/ssm-user
sh-4.2$ aws s3 ls
2022-12-07 01:48:52 ybawsbucket2022
sh-4.2$ aws s3 ls s3://ybawsbucket2022
2022-12-07 01:50:08      86065 new-report.png
sh-4.2$ cd reports
sh-4.2$ ls
dolphins.jpg files.zip report-test1.txt report-test2.txt report-test3.txt whale.jpg
sh-4.2$ aws s3 cp report-test1.txt s3://ybawsbucket2022
upload failed: ./report-test1.txt to s3://ybawsbucket2022/report-test1.txt An error occurred (AccessDenied) when calling the PutObject operation: Access Denied
sh-4.2$ pwd
/home/ssm-user/reports
sh-4.2$ aws s3 ls s3://ybawsbucket2022
2022-12-07 01:50:08      86065 new-report.png
2022-12-07 02:00:54      113 sample-file.txt
sh-4.2$ ls
dolphins.jpg files.zip report-test1.txt report-test2.txt report-test3.txt whale.jpg
sh-4.2$
```

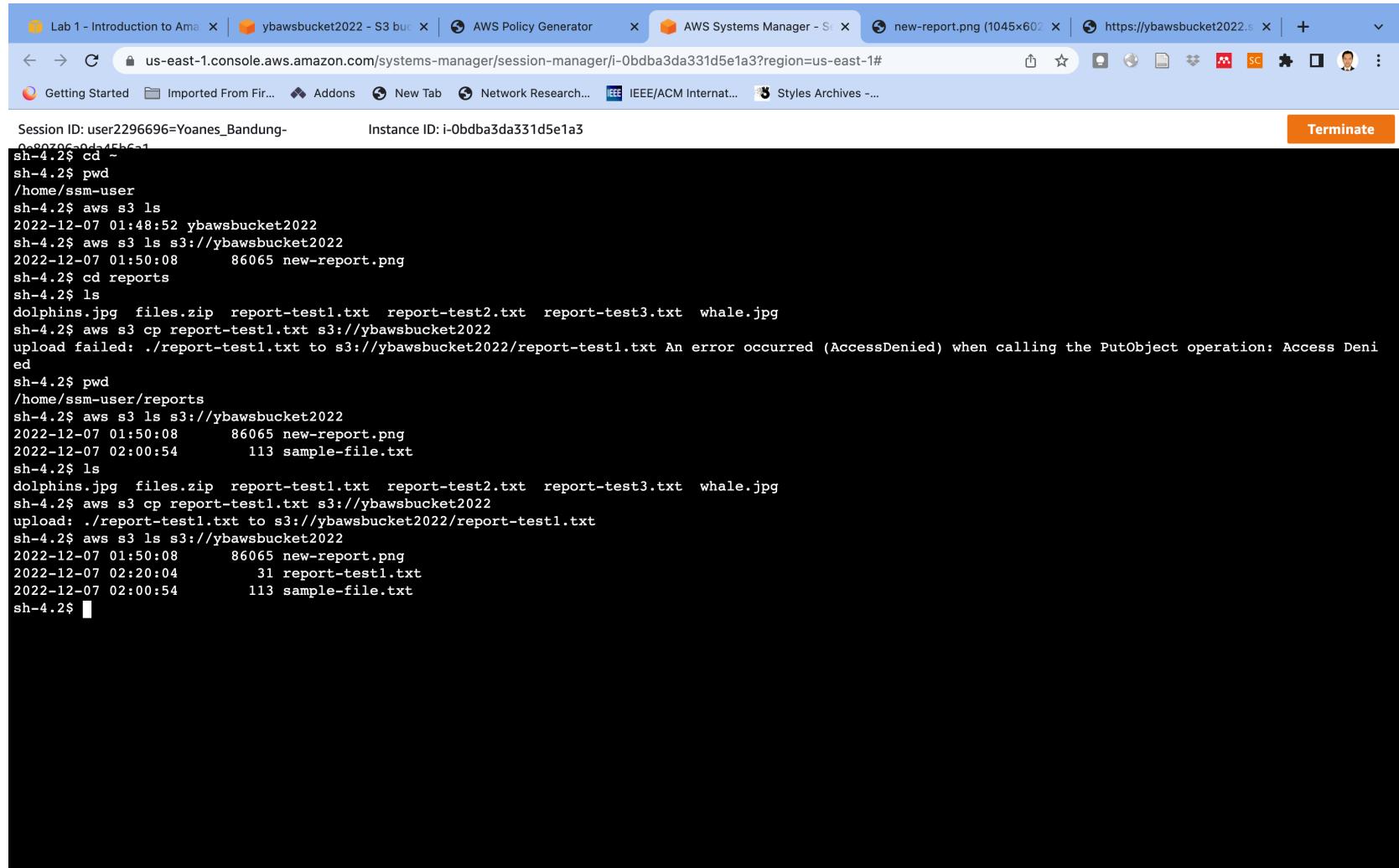
# Copying the report-test1.txt file to the S3 bucket



The screenshot shows a browser window with multiple tabs open. The active tab is titled "aws s3 cp report-test1.txt s3://ybawsbucket2022" and displays the AWS Systems Manager session logs. The logs show a user attempting to copy a file to an S3 bucket but encountering an Access Denied error.

```
Session ID: user2296696=Yoanes_Bandung          Instance ID: i-0bdba3da331d5e1a3
sh-4.2$ cd ~
sh-4.2$ pwd
/home/ssm-user
sh-4.2$ aws s3 ls
2022-12-07 01:48:52 ybawsbucket2022
sh-4.2$ aws s3 ls s3://ybawsbucket2022
2022-12-07 01:50:08      86065 new-report.png
sh-4.2$ cd reports
sh-4.2$ ls
dolphins.jpg files.zip report-test1.txt report-test2.txt report-test3.txt whale.jpg
sh-4.2$ aws s3 cp report-test1.txt s3://ybawsbucket2022
upload failed: ./report-test1.txt to s3://ybawsbucket2022/report-test1.txt An error occurred (AccessDenied) when calling the PutObject operation: Access Denied
sh-4.2$ pwd
/home/ssm-user/reports
sh-4.2$ aws s3 ls s3://ybawsbucket2022
2022-12-07 01:50:08      86065 new-report.png
2022-12-07 02:00:54      113 sample-file.txt
sh-4.2$ ls
dolphins.jpg files.zip report-test1.txt report-test2.txt report-test3.txt whale.jpg
sh-4.2$ aws s3 cp report-test1.txt s3://ybawsbucket2022
upload: ./report-test1.txt to s3://ybawsbucket2022/report-test1.txt
sh-4.2$
```

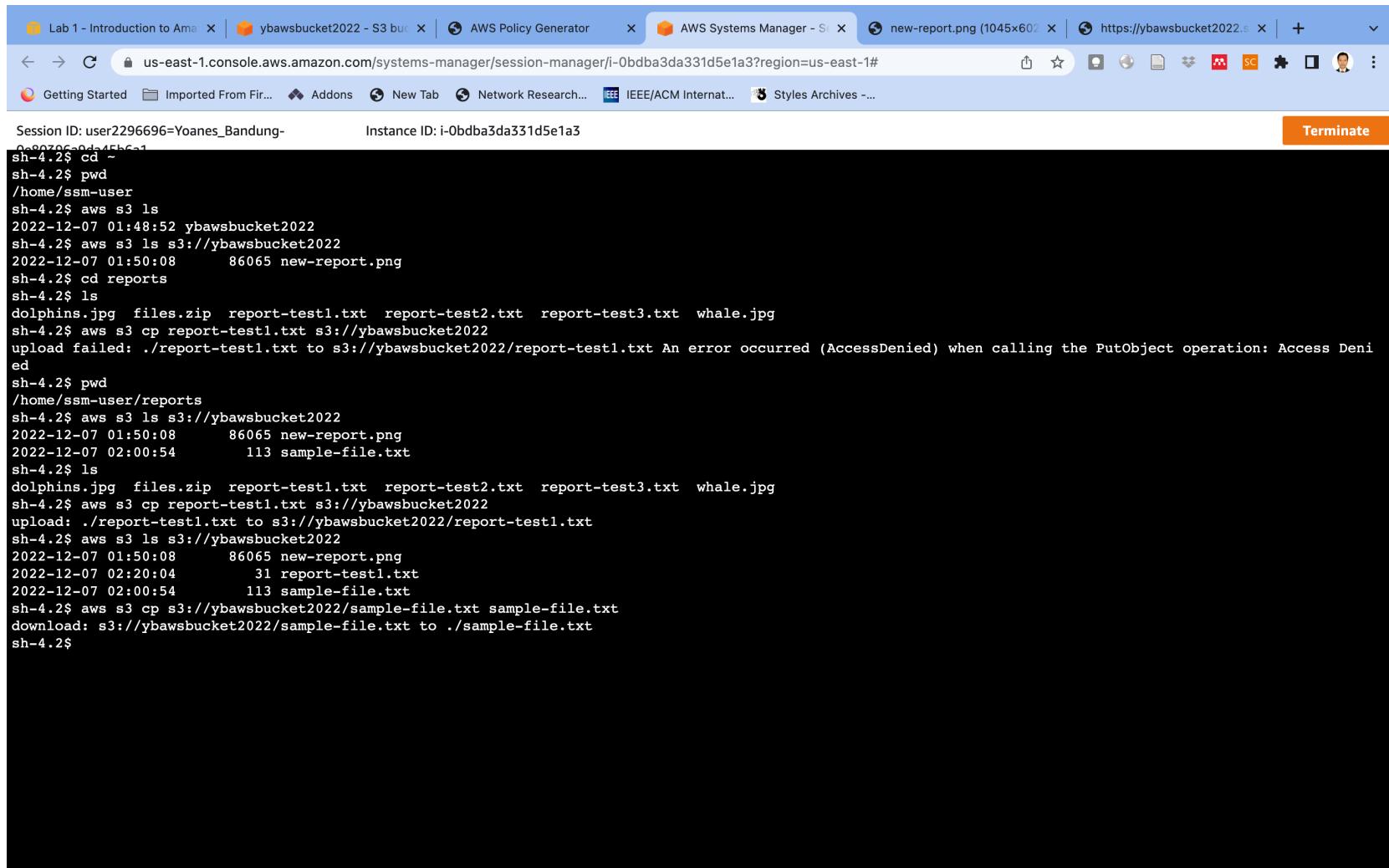
# Successfully uploaded (PutObject) a file from the EC2 instance to your S3 bucket



The screenshot shows a web browser window with multiple tabs open. The active tab is titled "us-east-1.console.aws.amazon.com/systems-manager/session-manager/i-0bdba3da331d5e1a3?region=us-east-1#". The browser interface includes a header with session ID, instance ID, and a "Terminate" button. Below the header is a terminal window displaying a Linux shell session. The session starts with the user navigating to their home directory and listing files. They then upload a file named "new-report.png" to an S3 bucket. This upload fails due to an Access Denied error. The user then navigates to a "reports" directory and uploads the same file again, successfully this time. The terminal session ends with the user exiting the shell.

```
Session ID: user2296696=Yoanes_Bandung Instance ID: i-0bdba3da331d5e1a3
sh-4.2$ cd ~
sh-4.2$ pwd
/home/ssm-user
sh-4.2$ aws s3 ls
2022-12-07 01:48:52 ybawsbucket2022
sh-4.2$ aws s3 ls s3://ybawsbucket2022
2022-12-07 01:50:08      86065 new-report.png
sh-4.2$ cd reports
sh-4.2$ ls
dolphins.jpg files.zip report-test1.txt report-test2.txt report-test3.txt whale.jpg
sh-4.2$ aws s3 cp report-test1.txt s3://ybawsbucket2022
upload failed: ./report-test1.txt to s3://ybawsbucket2022/report-test1.txt An error occurred (AccessDenied) when calling the PutObject operation: Access Denied
sh-4.2$ pwd
/home/ssm-user/reports
sh-4.2$ aws s3 ls s3://ybawsbucket2022
2022-12-07 01:50:08      86065 new-report.png
2022-12-07 02:00:54      113 sample-file.txt
sh-4.2$ ls
dolphins.jpg files.zip report-test1.txt report-test2.txt report-test3.txt whale.jpg
sh-4.2$ aws s3 cp report-test1.txt s3://ybawsbucket2022
upload: ./report-test1.txt to s3://ybawsbucket2022/report-test1.txt
sh-4.2$ aws s3 ls s3://ybawsbucket2022
2022-12-07 01:50:08      86065 new-report.png
2022-12-07 02:20:04      31 report-test1.txt
2022-12-07 02:00:54      113 sample-file.txt
sh-4.2$
```

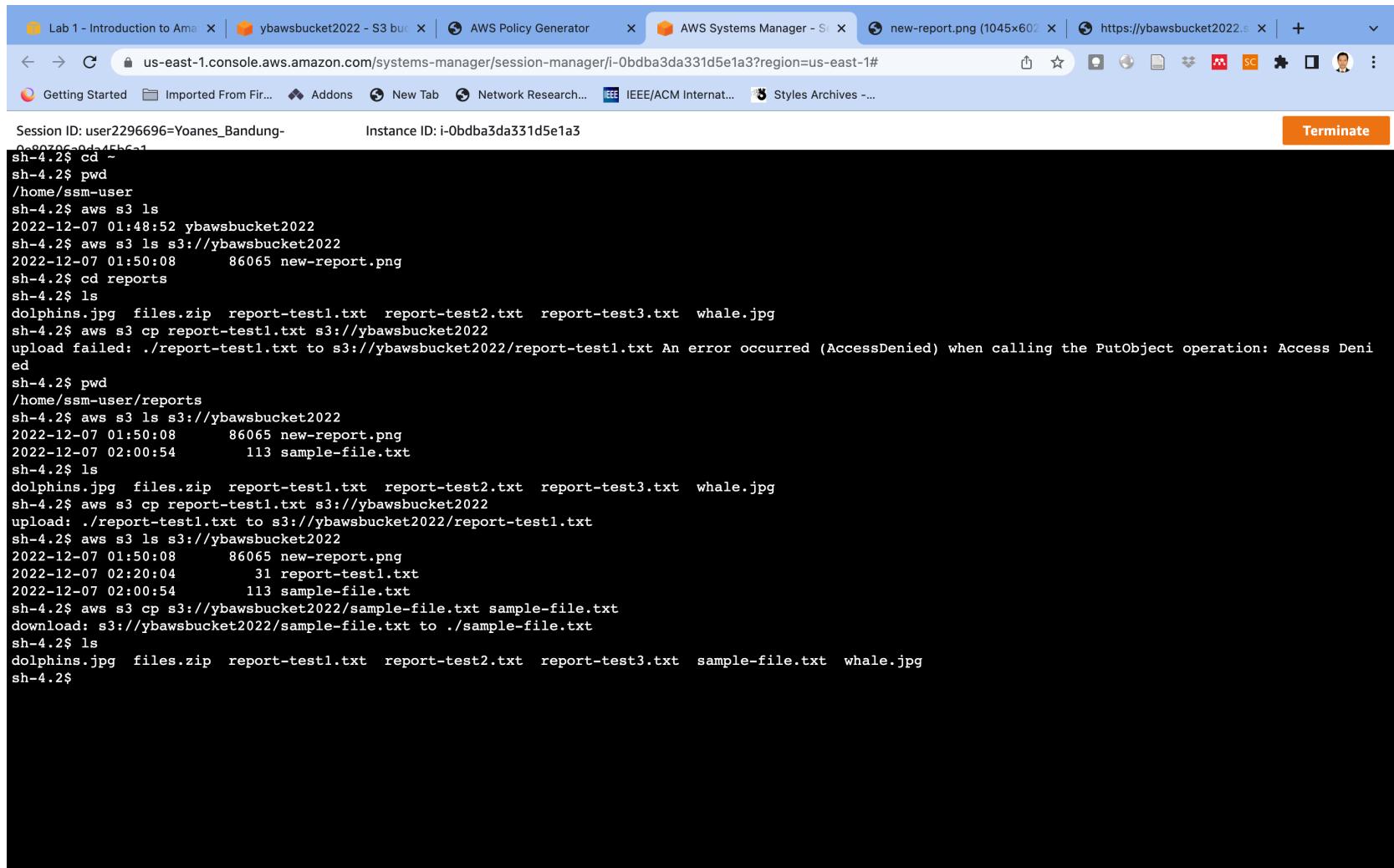
# Retrieve (GetObject) a file from Amazon S3 to the EC2 instance



The screenshot shows a web browser window with multiple tabs open. The active tab is titled "Session Manager - us-east-1.console.aws.amazon.com". The session ID is user2296696=Yoanes\_Bandung and the instance ID is i-0bdba3da331d5e1a3. The terminal window displays a shell session with the following command history:

```
sh-4.2$ cd ~  
sh-4.2$ pwd  
/home/ssm-user  
sh-4.2$ aws s3 ls  
2022-12-07 01:48:52 ybawsbucket2022  
sh-4.2$ aws s3 ls s3://ybawsbucket2022  
2022-12-07 01:50:08 86065 new-report.png  
sh-4.2$ cd reports  
sh-4.2$ ls  
dolphins.jpg files.zip report-test1.txt report-test2.txt report-test3.txt whale.jpg  
sh-4.2$ aws s3 cp report-test1.txt s3://ybawsbucket2022  
upload failed: ./report-test1.txt to s3://ybawsbucket2022/report-test1.txt An error occurred (AccessDenied) when calling the PutObject operation: Access Denied  
sh-4.2$ pwd  
/home/ssm-user/reports  
sh-4.2$ aws s3 ls s3://ybawsbucket2022  
2022-12-07 01:50:08 86065 new-report.png  
2022-12-07 02:00:54 113 sample-file.txt  
sh-4.2$ ls  
dolphins.jpg files.zip report-test1.txt report-test2.txt report-test3.txt whale.jpg  
sh-4.2$ aws s3 cp report-test1.txt s3://ybawsbucket2022  
upload: ./report-test1.txt to s3://ybawsbucket2022/report-test1.txt  
sh-4.2$ aws s3 ls s3://ybawsbucket2022  
2022-12-07 01:50:08 86065 new-report.png  
2022-12-07 02:20:04 31 report-test1.txt  
2022-12-07 02:00:54 113 sample-file.txt  
sh-4.2$ aws s3 cp s3://ybawsbucket2022/sample-file.txt sample-file.txt  
download: s3://ybawsbucket2022/sample-file.txt to ./sample-file.txt  
sh-4.2$
```

# You now see the sample-file.txt in your file list. Congratulations!



The screenshot shows a web browser window with multiple tabs open. The active tab is titled "aws s3 cp report-test1.txt s3://ybawsbucket2022" and displays a terminal session. The terminal output shows a user navigating through their AWS SSM session, listing files in their home directory, and attempting to upload a file to an S3 bucket. An error message indicates that the user lacks the necessary permissions (AccessDenied) for the PutObject operation. The session ends with the user exiting the terminal.

```
Session ID: user2296696=Yoanes_Bandung          Instance ID: i-0bdba3da331d5e1a3
sh-4.2$ cd -
sh-4.2$ pwd
/home/ssm-user
sh-4.2$ aws s3 ls
2022-12-07 01:48:52 ybawsbucket2022
sh-4.2$ aws s3 ls s3://ybawsbucket2022
2022-12-07 01:50:08      86065 new-report.png
sh-4.2$ cd reports
sh-4.2$ ls
dolphins.jpg files.zip report-test1.txt report-test2.txt report-test3.txt whale.jpg
sh-4.2$ aws s3 cp report-test1.txt s3://ybawsbucket2022
upload failed: ./report-test1.txt to s3://ybawsbucket2022/report-test1.txt An error occurred (AccessDenied) when calling the PutObject operation: Access Denied
sh-4.2$ pwd
/home/ssm-user/reports
sh-4.2$ aws s3 ls s3://ybawsbucket2022
2022-12-07 01:50:08      86065 new-report.png
2022-12-07 02:00:54      113 sample-file.txt
sh-4.2$ ls
dolphins.jpg files.zip report-test1.txt report-test2.txt report-test3.txt whale.jpg
sh-4.2$ aws s3 cp report-test1.txt s3://ybawsbucket2022
upload: ./report-test1.txt to s3://ybawsbucket2022/report-test1.txt
sh-4.2$ aws s3 ls s3://ybawsbucket2022
2022-12-07 01:50:08      86065 new-report.png
2022-12-07 02:20:04      31 report-test1.txt
2022-12-07 02:00:54      113 sample-file.txt
sh-4.2$ aws s3 cp s3://ybawsbucket2022/sample-file.txt sample-file.txt
download: s3://ybawsbucket2022/sample-file.txt to ./sample-file.txt
sh-4.2$ ls
dolphins.jpg files.zip report-test1.txt report-test2.txt report-test3.txt sample-file.txt whale.jpg
sh-4.2$
```

## Can be continued ..

---

- ▶ You have successfully uploaded and retrieved a file from Amazon EC2 to the S3 bucket.
- ▶ In the manual of Lab 1 - Introduction to Amazon S3:  
85. Return to the browser tab that displayed the Access Denied error for the sample-file.txt, and refresh the page.

THANK  
YOU

