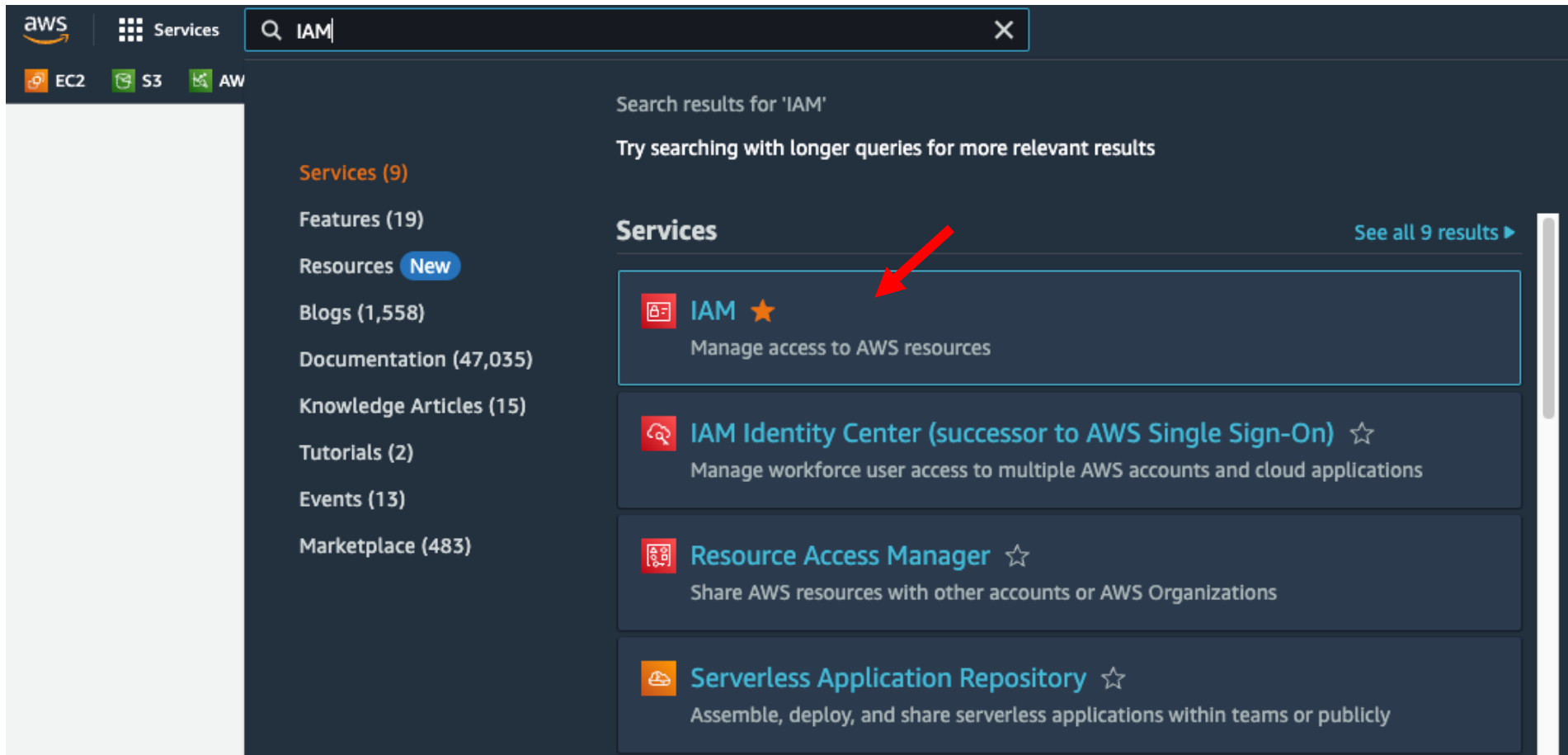


Adding new users to AWS and creating a budget for users

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Navigate to IAM (e.g. through search)



Click on “Users”

IAM resources

User groups

2

Users

22

Roles

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Policies

3

Identity providers

1

What's new

Updates for features in IAM

vi

Click “Add users”

IAM > Users

Users (22) [Info](#)

An IAM user is an identity with long-term credentials that is used to interact with AWS in an account.



Delete

Add users



Find users by username or access key

< 1 2 >

<input type="checkbox"/>	User name	Groups	Last activity	MFA	Password age	Active key age
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Enter user details

- For **computational people within the group** provide access to AWS Management Console
- **Not needed for collaborators or data transfer**
- Use autogenerated password that needs to be changed upon log-in

Step 1
Specify user details

Step 2
Set permissions

Step 3
Review and create

Step 4
Retrieve password

Specify user details

User details

User name

edridge

The user name can have up to 64 characters. Valid characters: A-Z, a-z, 0-9, and + = , . @ _ - (hyphen)

☒ Provide user access to the AWS Management Console - *optional*
If you're providing console access to a person, it's a [best practice](#) to manage their access in IAM Identity Center.

Do you want to provide console access to a person?
We recommend that you use Identity Center to provide console access to a person. With Identity Center, you can centrally manage user access to their AWS accounts and cloud applications. To do so, sign into the console by using the credentials of the management account in AWS Organizations, and then enable Identity Center. If you aren't the management account owner, contact the owner to perform this task.

Console password

☒ Autogenerated password
You can view the password after you create the user.

☐ Custom password
Enter a custom password for the user.

☐ Show password

- Must be at least 12 characters long
- Must include at least one uppercase letter (A-Z)
- Must include at least one lowercase letter (a-z)
- Must include at least one number (0-9)
- Must include at least one non-alphanumeric character (! @ # \$ % ^ & * () _ + - = [] { } | ')

☒ Users must create a new password at next sign-in (recommended).

Set permissions

- For **computational people within the group** use “LabAdmins” (this is full admin access)
- For **collaborators/data transfer** use “S3_access_group” (only S3 access)

IAM > Users > Create user

Step 1
[Specify user details](#)

Step 2
Set permissions

Step 3
[Review and create](#)

Step 4
[Retrieve password](#)

Set permissions

Add user to an existing group or create a new one. Using groups is a best-practice way to manage user's permissions by job functions. [Learn more](#)

Permissions options

☒ **Add user to group**
Add user to an existing group, or create a new group. We recommend using groups to manage user permissions by job function.

☐ **Copy permissions**
Copy all group memberships, attached managed policies, and inline policies from an existing user.

☐ **Attach policies directly**
Attach a managed policy directly to a user. As a best practice, we recommend attaching policies to a group instead. Then, add the user to the appropriate group.

User groups (1/2)

[Refresh](#) [Create group](#)

<input type="checkbox"/>	Group name ↗	Users	Attached policies ↗	Created
<input checked="" type="checkbox"/>	LabAdmins	15	AdministratorAccess, SecurityAudit and ...	2020-04-03 (3 years ago)
<input type="checkbox"/>	S3_access_group	7	AmazonS3FullAccess	2021-01-04 (2 years ago)

► **Permissions boundary** - optional
Set a permissions boundary to control the maximum permissions for this user. Use this advanced feature used to delegate permission management to others. [Learn more](#)

[Cancel](#) [Previous](#) [Next](#)

Review and click “Create user”

IAM > Users > Create user

Step 1
Specify user details

Step 2
Set permissions

Step 3
Review and create

Step 4
Retrieve password

Review and create


Review your choices. After you create the user, you can view and download the autogenerated password, if enabled.

User details

User name edridge	Console password type Autogenerated	Require password reset Yes
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Permissions summary

< 1 >

Name 	Type	Used as
LabAdmins	Group	Permissions group

Tags - optional


Tags are key-value pairs you can add to AWS resources to help identify, organize, or search for resources. Choose any tags you want to associate with this user.

No tags associated with the resource.

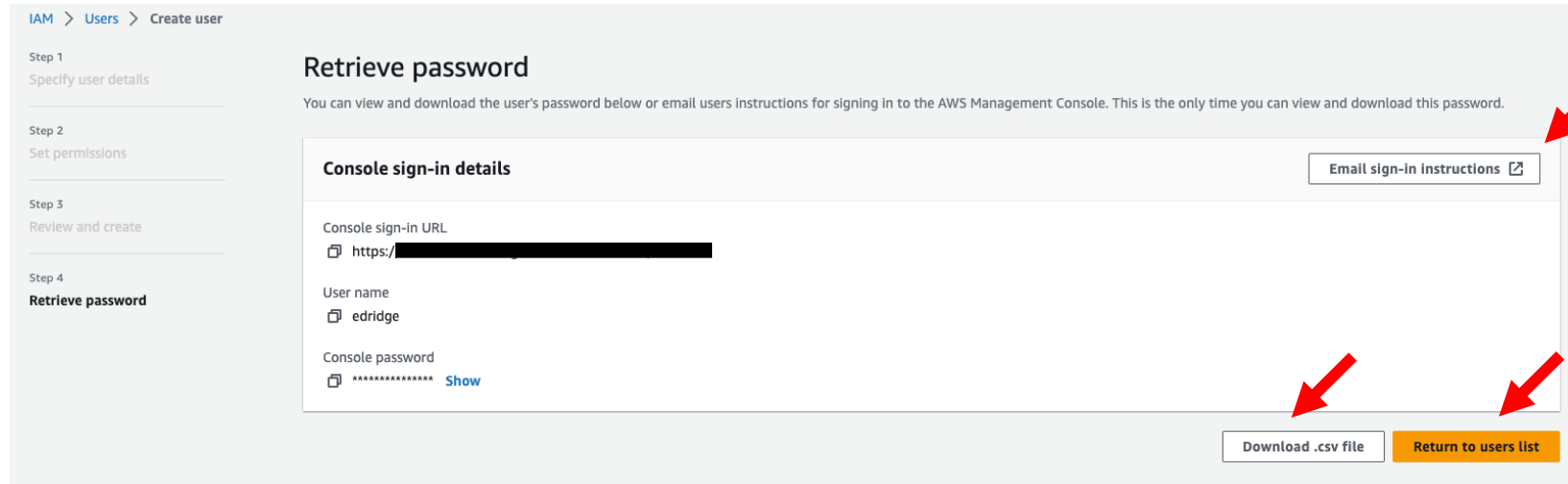
Add new tag

You can add up to 50 more tags.

Cancel Previous **Create user**



Send instructions and password in separate emails



IAM > Users > Create user

Step 1
Specify user details

Step 2
Set permissions

Step 3
Review and create

Step 4
Retrieve password

Retrieve password

You can view and download the user's password below or email users instructions for signing in to the AWS Management Console. This is the only time you can view and download this password.

Console sign-in details

Console sign-in URL
https://[REDACTED]

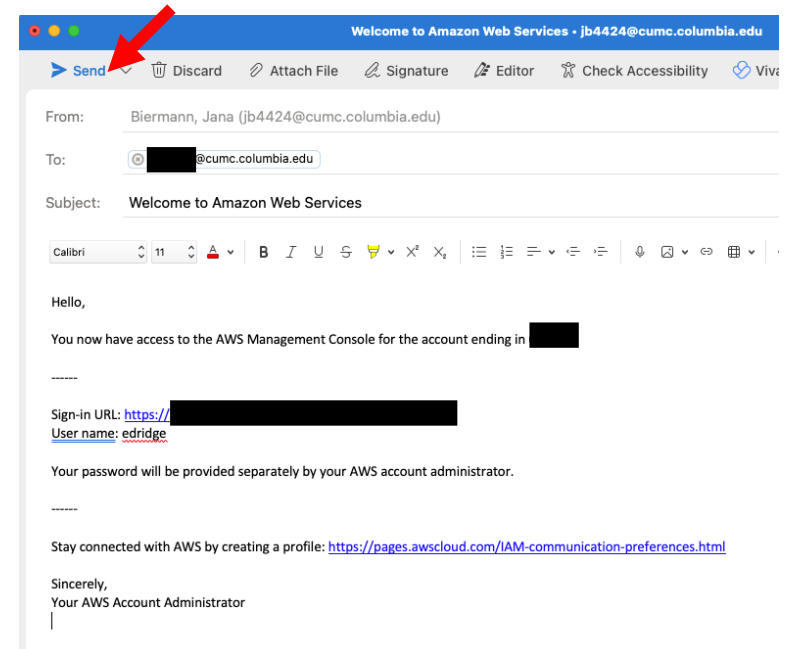
User name
edridge

Console password
[REDACTED] [Show](#)

[Email sign-in instructions](#)

[Download .csv file](#) [Return to users list](#)

- Send automated email with sign-in instructions
- Download password (.csv file)
- Send password and specific instructions in separate email



Send password separately

Hi,

Please find attached your password for AWS access.

Please read our AWS instructions and familiarize yourself with our best practices here:

https://github.com/JanaBiermann/single_cell_tools/tree/main/aws

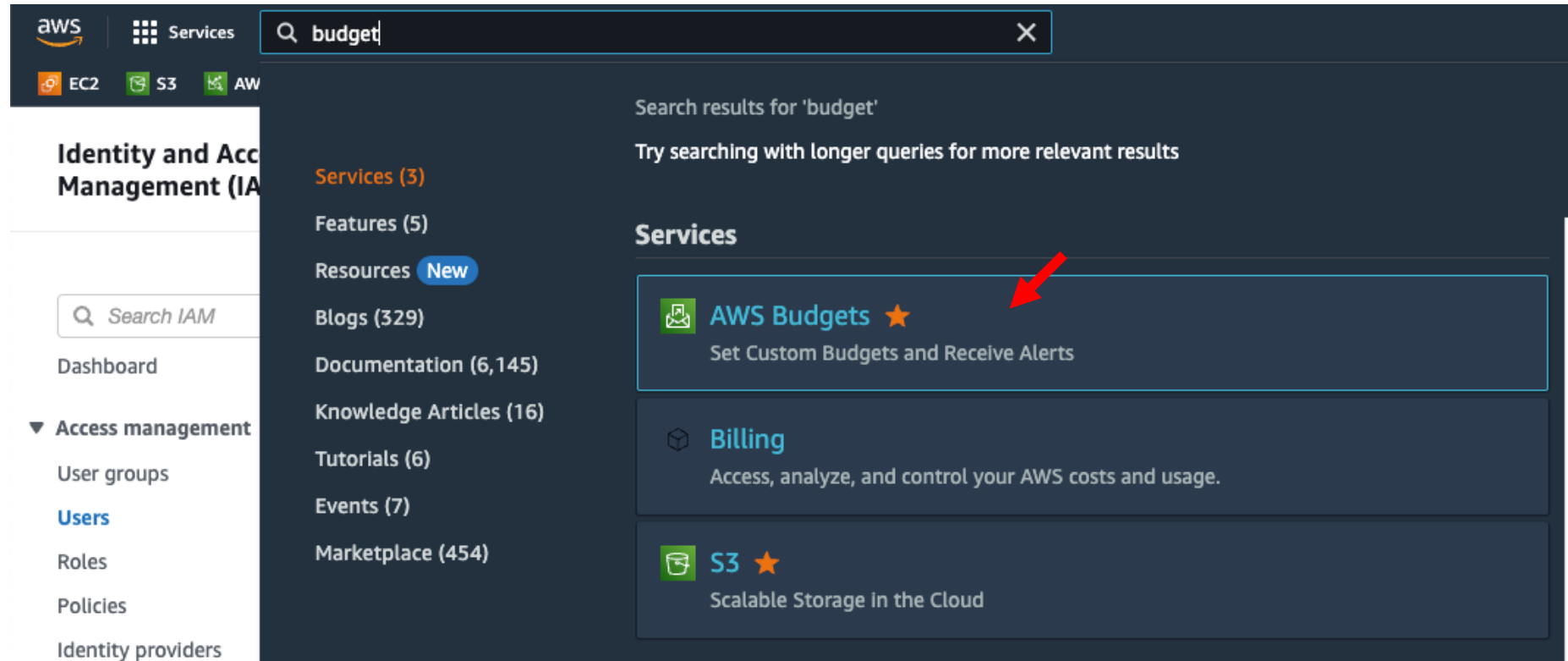
I'll set up a budget alarm for you once you have accumulated some costs.

Please always label you instances, volumes, snapshots, and AMLs starting with your name and check regularly if they are still needed.

Let me know if you have any questions.

Create a budget alarm for new users

- Navigate to “AWS Budgets”



Click “Create budget”

[AWS Billing](#) > [Budgets](#) > [Overview](#)

Overview [Info](#)

Budgets (11) [Info](#)

Show all budgets ▼

 Download CSV

Actions ▼

Create budget

< 1 > 

Choose “Customize” and “Cost budget”

AWS Billing > Budgets > Create budget

Step 1
Choose budget type

Step 2
Set your budget

Step 3
Configure alerts

Step 4 - Optional
Attach actions

Step 5
Review

Choose budget type [Info](#)

Budget setup

☐ Use a template (simplified)
Use the recommended configurations. You can change some configuration options after the budget is created.

☒ **Customize (advanced)**
Customize a budget to set parameters specific to your use case. You can customize the time period, the start month, and specific accounts.

Budget types

☒ **Cost budget - Recommended**
Monitor your costs against a specified dollar amount and receive alerts when your user-defined thresholds are met. Using cost budgets, the budgeted amount you set represents your expected cloud spend. For example, you can set a cost budget for a business unit and then add additional parameters such as the associated member accounts.

☐ Usage budget
Monitor your usage of one or more specified usage types or usage type groups and receive alerts when your user-defined thresholds are met. Using usage budgets, the budgeted amount represents your expected usage.

Name budget after user and set amount

Details

Budget name
Provide a descriptive name for this budget.

Monthly budget - Jana

Names must be between 1-100 characters.

Set budget amount

Period
Daily budgets do not support enabling forecasted alerts, or daily budget planning.

Monthly

Budget renewal type

☒ **Recurring budget**
Recurring budgets renew on the first day of every monthly billing period.

☐ **Expiring budget**
Expiring monthly budgets stop renewing at the end of the selected expiration month.

Start month

May 2023

Budgeting method [Info](#)

Fixed
Create a budget that tracks against a single monthly budgeted amount.

Enter your budgeted amount (\$)
Last month's cost: \$5,297.02

1000

Filter for user costs using “Tag” and “aws:createdBy”

Create a budget that tracks against a single monthly budgeted amount.

Enter your budgeted amount (\$)
Last month's cost: \$5,297.02

1000.00

Budget scope [Info](#)
Add filtering and use advanced options to narrow the set of cost information tracked as part of this budget

Scope options

☐ All AWS services (Recommended)
Track any cost incurred from any service for this account as part of the budget scope

☒ Filter specific AWS cost dimensions
Select specific dimensions to budget against.
For example, you can select the specific service "EC2" to budget against.

Filters [Info](#) Remove all

Dimension
Tag

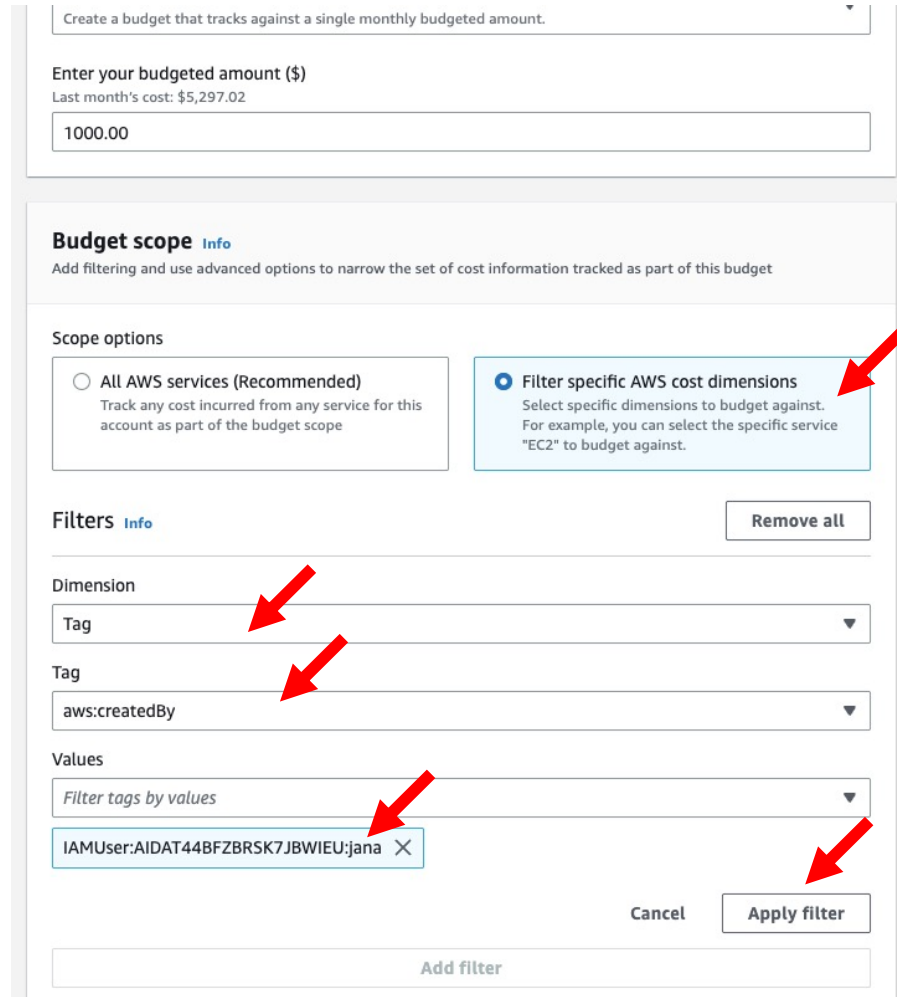
Tag
aws:createdBy

Values
Filter tags by values

IAMUser:AIDAT44BFZBRISK7JBWIEU:jana X

Cancel Apply filter

Add filter



Create alert and add user email address

Budget amount

Your budgeted amount: **\$1,000.00**
To change your budgeted amount, go back to step 2.

▼ **Alert #1**

Remove

Set alert threshold

Threshold
When should this alert be triggered?

75

% of budgeted amount ▼

Trigger
How should this alert be triggered?

Actual ▼

Summary: When your actual cost is greater than **75.00% (\$750.00)** of your **budgeted amount (\$1,000.00)**, the alert threshold will be exceeded.

Notification preferences
Select one or more notification preferences to receive alerts.

Email recipients
Specify the email recipients you want to notify when the threshold has exceeded.

jb4424@cumc.columbia.edu

Maximum number of email recipients is 10.

[► Amazon SNS Alerts - Optional info](#)

[► AWS Chatbot Alerts](#)

Adding actions other than alert is usually not needed

[AWS Billing](#) > [Budgets](#) > Create budget

Step 1

Choose budget type

Step 2

Set your budget

Step 3

Configure alerts

Step 4 - Optional


Attach actions

Step 5

Review


Attach actions - *Optional* [Info](#)

▼ Using budgets actions



What is a budget action?

A budget action allows you to define and trigger cost saving responses to reinforce a cost-conscious culture. You have the option to attach actions that run whenever your alert threshold has been exceeded, such as stopping an EC2 instance from incurring any further costs. You can select the alerts to which you would like to attach actions, then define these actions.



How to get started?

To create a budget action, you will first need an alert threshold created from step 2. If you have already created an alert threshold select the type of action you want.

▼ Alert #1 (0 actions attached)

Threshold	Email recipients
75%	jb4424@cumc.columbia.edu
Threshold measured against	Amazon SNS
Actual Costs	Not configured

Add action

Review and create budget

[AWS Billing](#) > [Budgets](#) > Create budget

Step 1
[Choose budget type](#)

Step 2
[Set your budget](#)

Step 3
[Configure alerts](#)

Step 4 - Optional
[Attach actions](#)

Step 5
Review

Review [Info](#)

Step 1: Choose budget type

Edit

Budget type

Cost budget
Monitor your costs against a specified dollar amount and receive alerts when your user-defined thresholds are met.

Step 2: Set up your budget

Edit

Budget details

Name	Start date	Budget amount
Monthly budget - Jana	May 2023	\$1,000.00
Period	End date	
Monthly	-	

► Additional budget parameters

Step 3: Configure alerts

Edit

Alerts

Alert #1

Inform user about budget

Hi,

I added you to our AWS budget list. It's just to give you an idea of how much you're spending.

Feel free to adjust your budget as you like. Currently, it's at \$1000 per month with an alert at 75%.

You can adjust your budget to your preferences under "AWS Budgets".