amazon web services | Cloud Credits for Research

AWS Cloud Credits for Research - Useful Links and Information

Billing

Set up Billing Alerts to help monitor the charges on your AWS bill! **Please note that upon reaching your credit amount, your billing will automatically switch to the credit card on file and the account will be charged immediately upon going over the credit amount.** We cannot provide refunds for overage charges.

Identity and Access Management

Learn about AWS Identity and Access Management (IAM). It enables you to securely control access to AWS services and resources for your users. Using IAM, you can create and manage AWS users and groups and use permissions to allow and deny their access to AWS resources. First-time users should visit the IAM Best Practices section of our Using IAM guide. To get started using IAM, sign in to the AWS Management Console.

Other Useful Information

Use Amazon CloudWatch! This will help detect and shut down Amazon EC2 instances that have gone idle or underutilized. This feature allows you to stop or terminate an EC2 instance automatically when utilization drops below a threshold they set, simply by creating a CloudWatch alarm.

Read about 'Setting Up Multiuser Environments (for Classroom Training and Research)'. This whitepaper provides an overview of how to create and manage multiuser environments in the AWS cloud so that professors and researchers can leverage AWS for student labs, training applications, individual IT environments, and cloud computing courses.

AWS Cloud Computing Whitepapers is a section featuring a comprehensive list of technical AWS whitepapers, covering topics such as architecture, security and economics. These whitepapers have been authored by the AWS Team, independent analysts or the AWS Community (Customers or Partners).

Regions – you can launch services in any one of our regions, but the Management Console can only show you one region at a time. To be completely sure you've closed everything down, follow these instructions in any region you've used or might have used. The links in this document go to the US East (North Virginia) region, but you can use the menu in the top right of the console to change to another region whenever you want.

Elastic Beanstalk is a service that makes sure you have all the resources you need running. If you've got an environment running under Elastic Beanstalk, it will re-launch any other services you start – that's how it makes sure everything stays up and running for you. Before you terminate any EC2 instances, have a look and see if you've got a beanstalk, and terminate that too.

Like Elastic Beanstalk, Load Balancers keep a minimum number of EC2 instances running, so if you terminate the last instance under a load balancer a new one will be launched.

After you've dealt with the previous 2 items, you're good to start terminating EC2 instances. Remember, if you terminate an instance, you delete it for good. If you stop it, you can start it again later but you may still be charged for storage.

Elastic Block Storage **-** most EC2 instances will delete their EBS volumes when they are terminated, but it is possible to set an instance up to keep the volume and the data inside of it. Check under EBS and if you're sure you don't need the data anymore, delete those volumes too.

Any Elastic IP Addresses or EIPs attached to an instance when it's terminated will be unattached, but still allocated to you. If you don't need that specific IP address anymore, release it so someone else can use it.

Everything else! The services above interact with each other in very specific ways, but the rest of AWS' range are much more individual, so all you need to do it check through for anything else you may have launched. The most common services are RDS and S3, but anything you had a look at might need to be closed down again.

Resources - Visit our Knowledge Center for more information or AWS Answers to find answers to common questions about architecting, building, and running applications on the Amazon Web Services cloud.

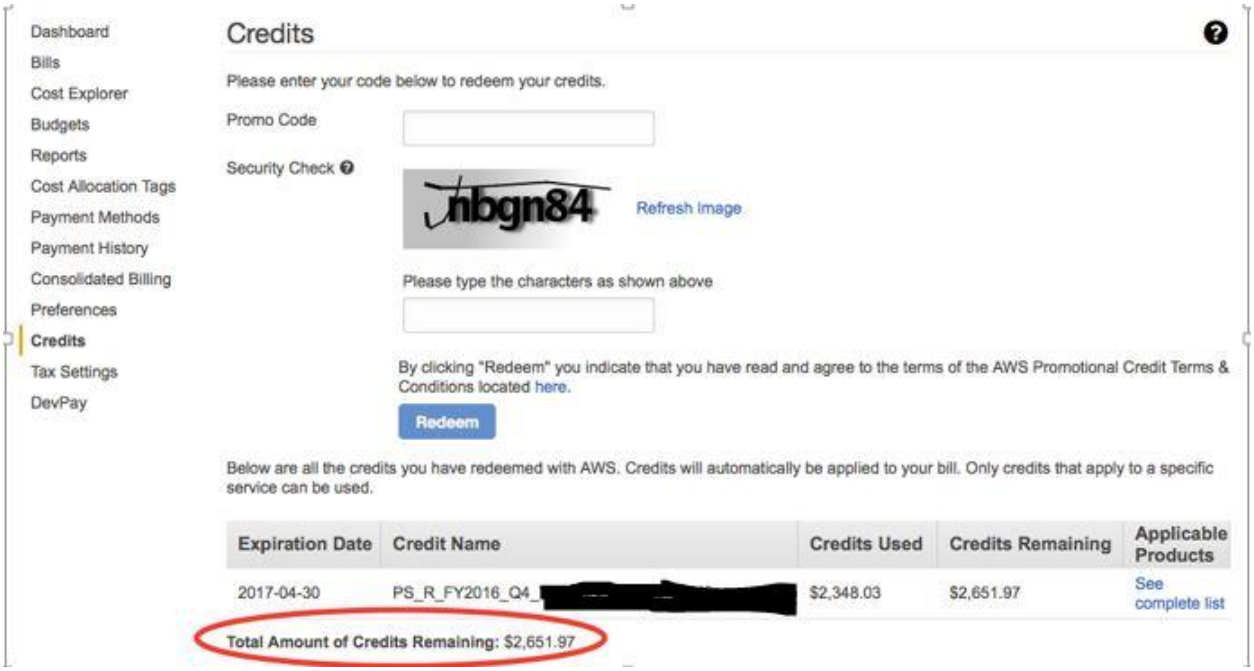
Also refer to the **Intro to Cloud Credits for Research Webinar** slides and recording, which outline important information on tracking credits usage, budgeting, and provide a plethora of valuable links and training information:

Slide share: https://www.slideshare.net/secret/oYeFPVs9Dy4vfH
Presentation recording: https://connect.awswebcasts.com/p20o1xrldsy/

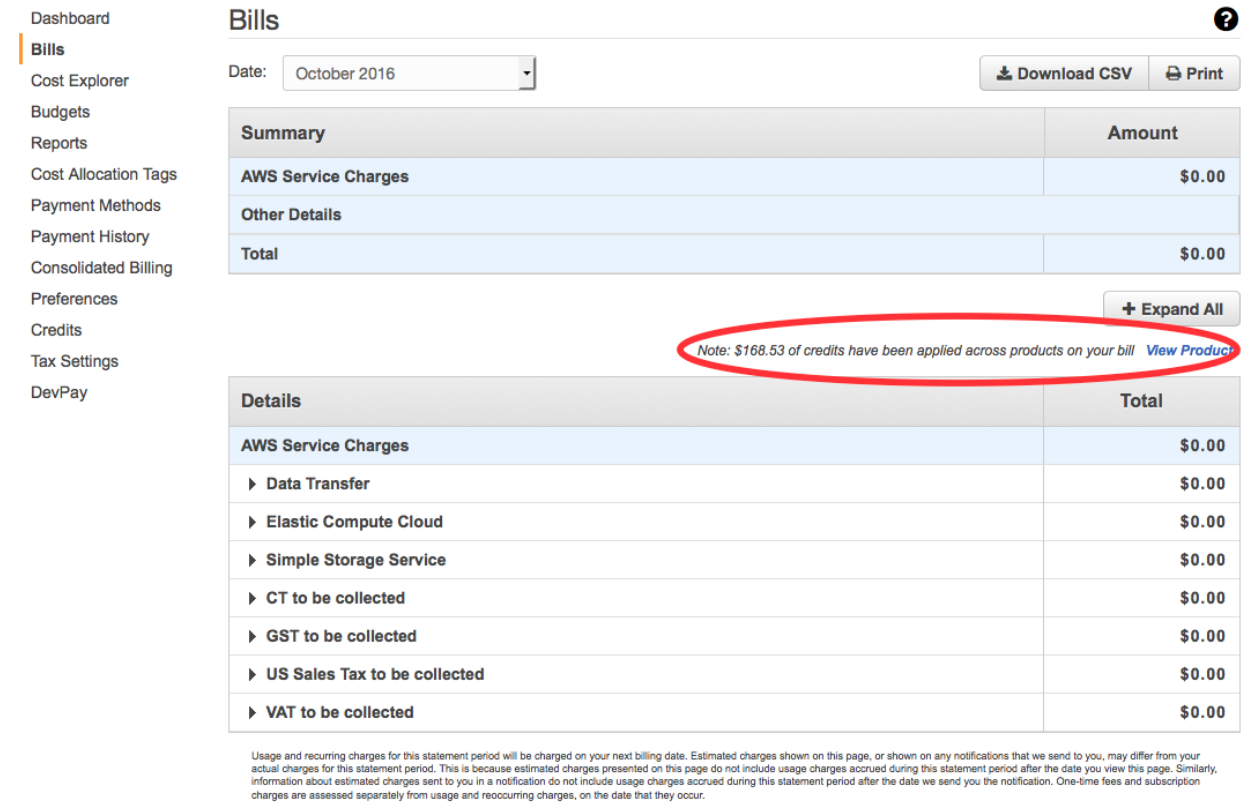
The AWS Cloud Credits for Research Team
aws.amazon.com/education/research-credits

How to track your credit consumption in real time:

1/ Visit the Credits tab and view credits remaining:



2/ Visit Bills tab and view current month's updated credit usage:



3/ Subtract these amounts:

Total amount of credits remaining (through end of last month): $2651.97

Total amount of credits used (this month): - $168.63

Total remaining: $2483.34