

Pricing Strategies

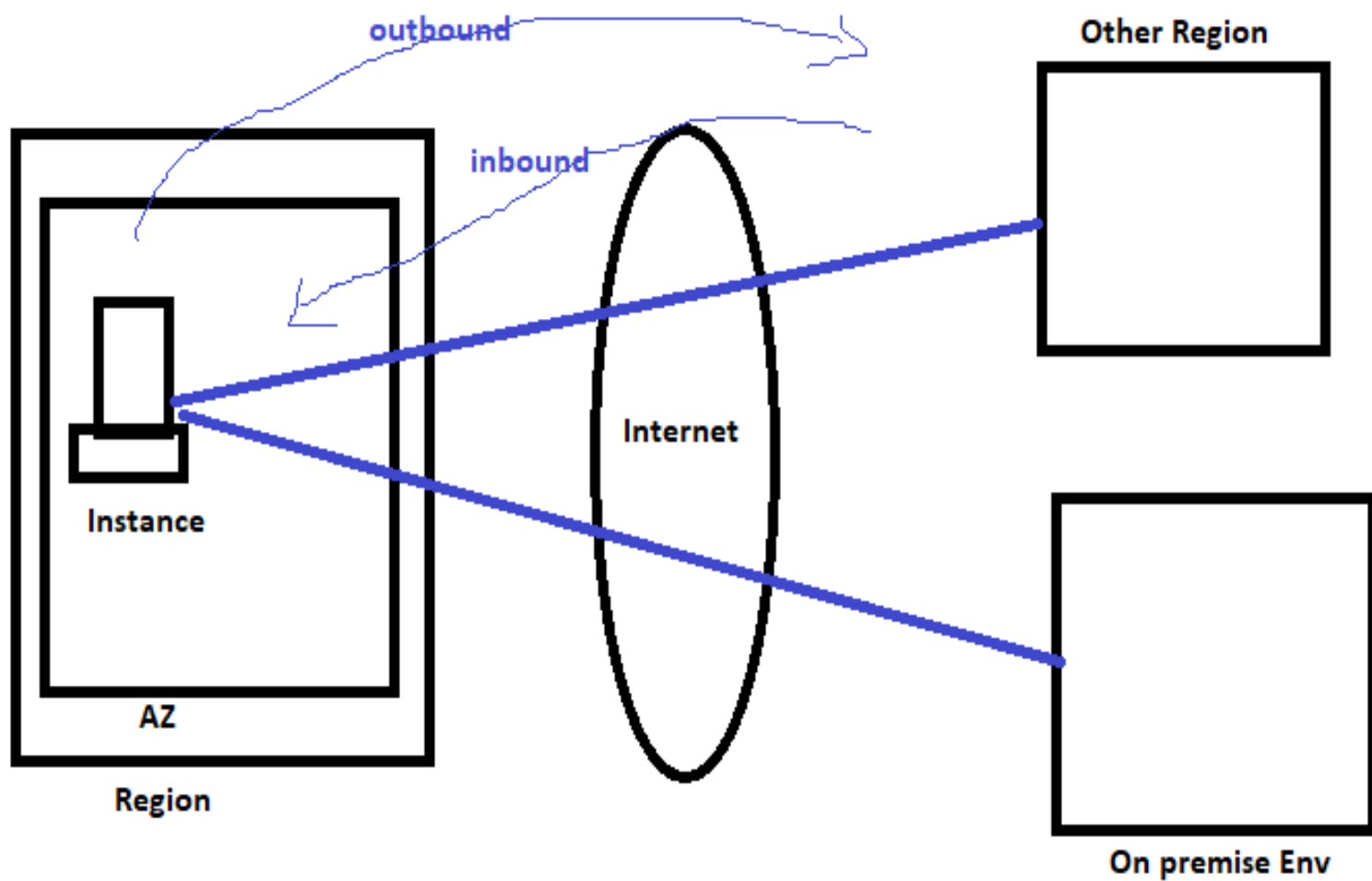


Topics to be covered--Billing

- 1) AWS Pricing Strategies
- 2) Instance pricing model
- 3) AWS Free Tier Eligible
- 4) Estimating Amazon EC2 costs
- 5) AWS Calculator
- 5) AWS Billing and Cost Management

Pricing Strategies in AWS

- ✓ There are three fundamental drivers of cost with AWS: **compute**, **storage**, and **outbound data transfer**.
- ✓ In most cases, there is **no charge for inbound data transfer** or for data transfer between other AWS services within the same region.
- ✓ **Outbound data transfer** is aggregated across services and then **charged at the outbound data transfer rate**. This charge appears on the monthly statement as AWS Data Transfer Out.



Instance pricing model for the job

- ✓ **On Demand Instance** ---- means you pay for compute or database capacity with no long-term commitments or upfront payments.
- ✓ • **Dedicated Instances** -- Available with Amazon EC2 run in a virtual private cloud (VPC) on hardware that's dedicated to a single customer.
- ✓ • **Spot Instances**--- An Amazon EC2 pricing mechanism that lets you purchase spare computing capacity with no upfront commitment at discounted hourly rates.
- ✓ • **Reserved Instance** -- provide you with the ability to receive a greater discount, up to 75 percent, by paying for capacity ahead of time.

What does "up front payment" mean?

Pay before you receive the product or service. Sometimes it's a payment in full, sometimes a partial payment with balance upon satisfactory delivery of the good or service. It's used in more informal dealings than in day to day shopping.

what are other
words for
upfront payment?



advance payment, advance,
prepayment, earnest money,
downpayment, imprest



AWS Free Tier

More than 85 products and start building on AWS using the free tier. Three different types of free offers are available depending on the product used.



Always free

These free tier offers do not expire and are available to all AWS customers



12 months free

Enjoy these offers for 12-months following your initial sign-up date to AWS



Trials

Short-term free trial offers start from the date you activate a particular service

AWS Free Tier

The following free-tier offers are only available to new AWS customers, and are available for 12 months following your AWS sign-up date:

- ✓ Amazon Elastic Compute Cloud (Amazon EC2): **750 hours per month** of Linux, RHEL, or SLES t2.micro instance usage or 750 hours per month of Windows t2.micro instance usage
- ✓ Amazon Simple Storage Service (Amazon S3): **5 GB of Amazon S3** standard storage, 20,000 Get Requests, and 2,000 Put Requests
- ✓ Amazon Relational Database Service (Amazon RDS): 750 hours of Amazon RDS Single-AZ db.t2.micro Instances for running MySQL, PostgreSQL, MariaDB, Oracle BYOL, or SQL Server (running SQL Server Express Edition); 20 GB of database storage; 10 million I/Os; and 20 GB of backup storage
- ✓ Amazon CloudFront: 50 GB Data Transfer Out and 2,000,000 HTTP and HTTPS Requests each month

On-Demand Instances

With On-Demand Instances, you pay for compute capacity per hour or per second, depending on which instances you run. No longer-term commitments or upfront payments are needed. You can increase or decrease your compute capacity to meet the demands of your application and only pay the specified hourly rates for the instance you use. On-Demand Instances are recommended for:

- Users who prefer the low cost and flexibility of Amazon EC2 without upfront payment or longterm commitments
- Applications with short-term, spiky, or unpredictable workloads that cannot be interrupted
- Applications being developed or tested on Amazon EC2 for the first time

Spot Instances

Spot Instances allow you to request spare Amazon EC2 computing capacity for up to 90 percent off the On-Demand price. Spot Instances are recommended for:

- Applications that have flexible start and end times
- Applications that are only feasible at very low compute prices
- Users with urgent computing needs for a lot of additional capacity.

The Spot price is set by Amazon EC2 and fluctuates periodically depending on the supply of, and demand for, Spot Instance capacity. If your maximum bid exceeds the current Spot price, your bid request is fulfilled, and your instances will run until either you choose to terminate them or the Spot price exceeds your maximum bid, whichever comes first.

Estimating Amazon EC2 costs

To estimate the cost of using Amazon EC2, consider the following:

Clock hours of server time:

- ✓ Instance type
- ✓ Pricing model
- ✓ Number of instances
- ✓ Load balancing
- ✓ Detailed monitoring
- ✓ Auto Scaling
- ✓ Elastic IP addresses
- ✓ Operating systems and software packages

AWS Pricing Calculator

Estimate the cost for your architecture solution.

Configure a cost estimate that fits your unique business or personal needs with AWS products and services.

Create an estimate


Start your estimate with no commitment, and explore AWS services and pricing for your architecture needs.

Create estimate

Getting started

[What is the AWS Pricing Calculator?](#) 

[Getting started](#) 

[Generating estimates](#) 

How it works

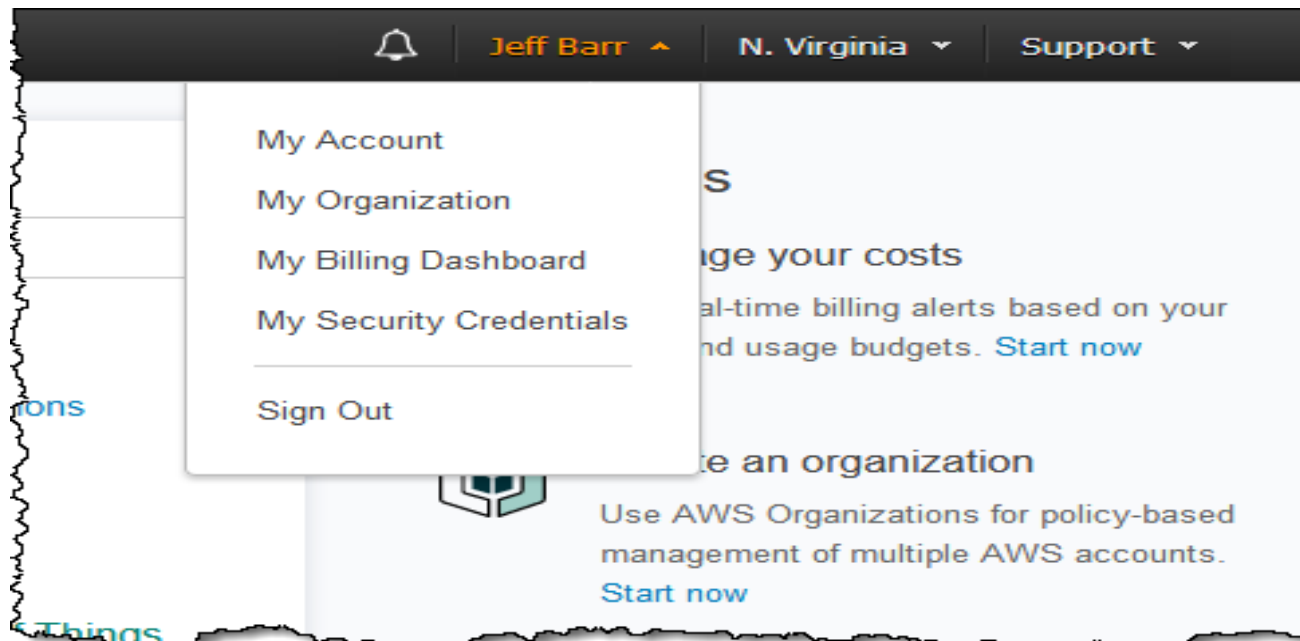


What is AWS Billing and Cost Management

- AWS Billing and Cost Management is the service that you use to pay your AWS bill, monitor your usage, and budget your costs.
- AWS automatically charges the credit card you provided when you signed up for a new account with AWS. Charges appear on your credit card bill monthly. You can view or update credit card information, and designate a different credit card for AWS to charge, on the Payment Methods page in the Billing and Cost Management console.
- The Billing and Cost Management service provides features that you can use to estimate and plan your AWS costs, receive alerts if your costs exceed a threshold that you set, assess your biggest investments in AWS resources, and, if you work with multiple AWS accounts, simplify your accounting.

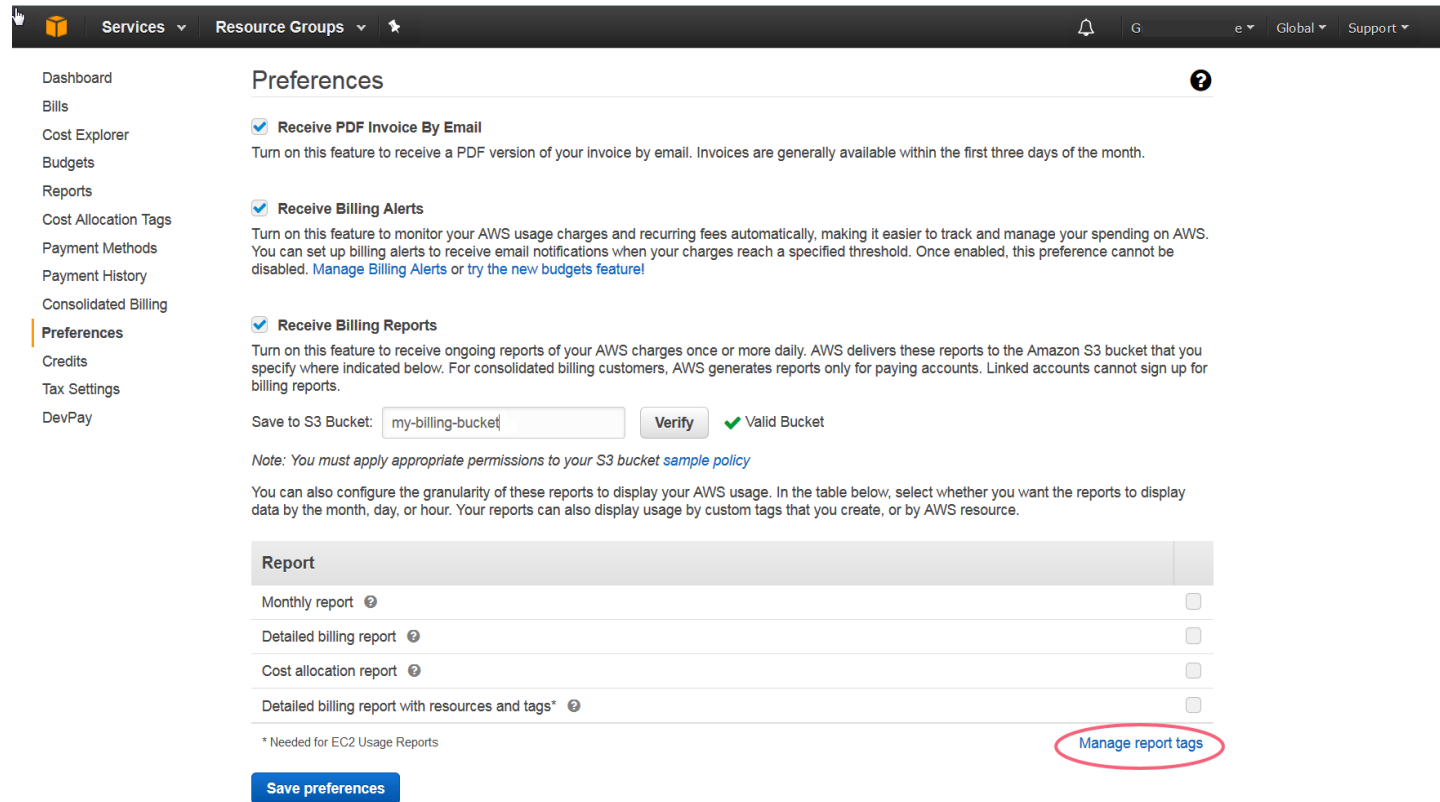
Configure Billing dashboard in AWS Console

- Before you can create an alarm for your estimated charges, you must enable billing alerts, so that you can monitor your estimated AWS charges and create an alarm using billing metric data. After you enable billing alerts, you cannot disable data collection, but you can delete any billing alarms that you created.
- After you enable billing alerts for the first time, it takes about 15 minutes before you can view billing data and set billing alarms.



Configure Billing dashboard in AWS Console

- Log on with Account - Go to my billing dashboard
- Preferences-- click on receive notification-- Save preferences



The screenshot shows the AWS Billing Preferences page. The left sidebar contains navigation links: Dashboard, Bills, Cost Explorer, Budgets, Reports, Cost Allocation Tags, Payment Methods, Payment History, Consolidated Billing, Preferences (highlighted), Credits, Tax Settings, and DevPay. The main content area is titled 'Preferences' and includes three sections: 'Receive PDF Invoice By Email', 'Receive Billing Alerts', and 'Receive Billing Reports'. The 'Receive Billing Reports' section has a text input field for 'Save to S3 Bucket' with the value 'my-billing-bucket', a 'Verify' button, and a green checkmark indicating a 'Valid Bucket'. Below this is a note about permissions and a table for selecting report granularity. The table has four rows: 'Monthly report', 'Detailed billing report', 'Cost allocation report', and 'Detailed billing report with resources and tags*'. Each row has a radio button. The 'Detailed billing report with resources and tags*' row is selected. At the bottom right, there is a link 'Manage report tags' circled in red. A 'Save preferences' button is at the bottom left.

Services Resource Groups

Dashboard Bills Cost Explorer Budgets Reports Cost Allocation Tags Payment Methods Payment History Consolidated Billing **Preferences** Credits Tax Settings DevPay

Preferences

☒ **Receive PDF Invoice By Email**
Turn on this feature to receive a PDF version of your invoice by email. Invoices are generally available within the first three days of the month.

☒ **Receive Billing Alerts**
Turn on this feature to monitor your AWS usage charges and recurring fees automatically, making it easier to track and manage your spending on AWS. You can set up billing alerts to receive email notifications when your charges reach a specified threshold. Once enabled, this preference cannot be disabled. [Manage Billing Alerts](#) or [try the new budgets feature!](#)

☒ **Receive Billing Reports**
Turn on this feature to receive ongoing reports of your AWS charges once or more daily. AWS delivers these reports to the Amazon S3 bucket that you specify where indicated below. For consolidated billing customers, AWS generates reports only for paying accounts. Linked accounts cannot sign up for billing reports.

Save to S3 Bucket: Verify ✓ Valid Bucket

Note: You must apply appropriate permissions to your S3 bucket [sample policy](#)

You can also configure the granularity of these reports to display your AWS usage. In the table below, select whether you want the reports to display data by the month, day, or hour. Your reports can also display usage by custom tags that you create, or by AWS resource.

Report	
Monthly report	<input type="radio"/>
Detailed billing report	<input type="radio"/>
Cost allocation report	<input type="radio"/>
Detailed billing report with resources and tags*	<input checked="" type="radio"/>

* Needed for EC2 Usage Reports

[Manage report tags](#)

Save preferences

Configure Billing dashboard in AWS Console

you create an alarm/budget that sends an email message when your estimated charges for AWS exceed a specified threshold.

- Under **Alarm Threshold**, replace the default name for the alarm (for example, My Estimated Charges) and a description for the alarm (for example, Estimated Monthly Charges)
- Under **Whenever charges for**, for **is**, choose **>=** and then type the monetary amount (for example, 200) that must be exceeded to trigger the alarm and send an email.

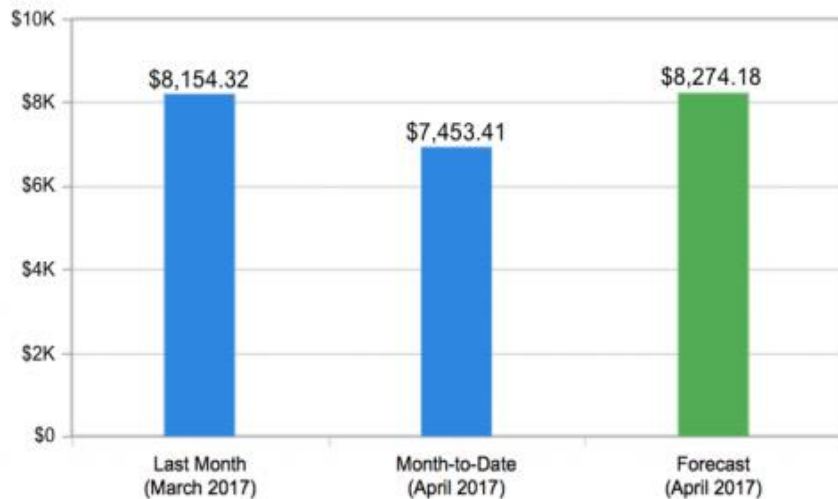
Spend Summary

[Cost Explorer](#)

Welcome to the AWS Account Billing console. Your last month, month-to-date, and month-end forecasted costs appear below.

Current month-to-date balance for April 2017

\$7,453.41








Month-to-Date Spend by Service

[Bill Details](#)

The chart below shows the proportion of costs spent for each service you use.



	EC2	\$3,700.71
	RDS	\$1,876.35
	ElastiCache	\$938.18
	DynamoDB	\$625.44
	Other Services	\$312.57
Tax		\$0.16
Total		\$7,453.41