
Getting Started with AWS

Free Usage Tier



Getting Started with AWS: Free Usage Tier

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What is the AWS Free Usage Tier?

Topics

- [Am I Eligible? \(p. 2\)](#)
- [Services on the Free Usage Tier \(p. 3\)](#)
- [Make the Most of Your Free Monthly Usage \(p. 5\)](#)

To understand the AWS Free Usage Tier, it helps to understand Amazon Web Services (AWS). AWS provides a flexible, cost-effective, scalable, and easy-to-use cloud computing platform that is suitable for research, educational use, individual use, and organizations of all sizes. The AWS cloud computing model allows you to pay for services on-demand and use as much or as little at any given time as you need. To learn more about AWS and what you can do with AWS, go to [Getting Started with AWS](#).

The [Amazon Web Services \(AWS\) free usage tier](#) gives you an unprecedented opportunity to test drive several key AWS products. By following the guidelines of the offer, you can gain experience with working in the cloud at no charge for an entire year. When your free usage expires or if your application use exceeds the free usage tier, you simply pay the standard, pay-as-you-go service rates. Restrictions apply. For more information, go to [offer terms](#). For full pricing information, go to [AWS Service Pricing Overview](#).

Not all of the services are part of the AWS free usage tier offering. To learn more about the current offerings for each service, go to [AWS Free Usage Tier](#). **If you have opened an AWS account in the last 365 days, you can already take advantage of the free usage tier. No additional signup is necessary. All you need to do is start using the services.** To find out if you qualify, see [Am I Eligible? \(p. 2\)](#). If you are eligible for the free usage tier and are being billed, it may be that you are using services that are not part of the free usage tier or that you are exceeding the guidelines of the offer. If you have questions about your account, go to <http://aws.amazon.com/contact-us/>.

This article provides tips for getting started with the free usage tier, and how to make the best use of this opportunity. For more information on launching Amazon EC2 instances, deploying web applications, tracking your account usage and cleaning up your AWS resources, see the following topics:

- [Launch an Amazon EC2 Instance \(p. 7\)](#)
- [Deploy a Sample Web Application in the Free Usage Tier \(p. 8\)](#)
- [Tracking Usage of Your AWS Resources \(p. 14\)](#)
- [Clean Up Your AWS Resources \(p. 24\)](#)

If this document is not exactly what you are looking for, the following documents can also help you get started.

- [Getting Started with AWS](#) — Provides information about AWS, ways to get started, and useful links to help you explore AWS.
- [Hosting Websites on Amazon S3](#) in the *Amazon Simple Storage Service Developer Guide* — Provides a walkthrough in just a few steps of a static website deployment that does not require running an application.
- [Amazon Simple Storage Service Getting Started Guide](#) — Provides a walkthrough in just a few steps to store content in the cloud.
- [Amazon Elastic Compute Cloud User Guide](#) — Provides information that helps you get started using Amazon EC2 instances.

Note

If you are looking for information about how to advertise products to your customers, you can find information at [Amazon.com Associates Program](#).

If you need information about your account or additional help, the following resources can help you:

- [Your Account](#) — Access and manage your account information.
- [Contact Us](#) — Questions about your account or billing.
- [Discussion Forums](#) — Post your questions and feedback.

Am I Eligible?

The free usage tier is available for one year after you open an AWS account. If you don't yet have an account, you can [sign up here](#).

If you're not sure whether you opened your account within the past year, you can check the account activity page. The following example shows you how to check if you are eligible.

1. Go to <http://aws.amazon.com/account/>.
2. Choose **Account Activity** from the list.

If you are eligible, you will see a note at the top of the screen like in the following picture.

Account Activity

Welcome [XXXXXXXXXXXX](#) | [Sign Out](#)
Account Number [XXXXXXXXXXXX](#)



You are eligible for the [AWS Free Usage Tier](#). See the [Getting Started Guide AWS Free Usage Tier](#) to learn how to get started with the free usage tier.

This Month's Activity as of April 19, 2012

The statement period for this report is April 1 - April 30, 2012. The charges on this page currently show activity through approximately 04/19/2012 20:59 GMT.

Select a different statement:

Services on the Free Usage Tier

Not all of AWS products are part of the free usage tier. The following table shows the products that either have free usage tier offerings or can be used at no additional charge. You're welcome to try out our other services while you're using the free usage tier, but normal usage fees will apply. Click on the services below to find out product detail information.

Note

You can mix and match free usage tier usage products with paid products; you will be charged only for your usage beyond the free usage tier.

Product	Free Usage Tier Pricing (For one year)	Has Free Usage Levels	No Additional Charge
Amazon Elastic Block Store (Amazon EBS)	✓		
Amazon Elastic Compute Cloud (Amazon EC2)	✓		
Amazon Relational Database Service (Amazon RDS)	✓		
Amazon Simple Email Service (Amazon SES)	✓		
Amazon Simple Storage Service (Amazon S3)	✓		
AWS Data Pipeline	✓		
Elastic Load Balancing	✓		
Amazon CloudWatch		✓	
Amazon DynamoDB		✓	
Amazon Simple Notification Service (Amazon SNS)		✓	
Amazon Simple Queue Service (Amazon SQS)		✓	
Amazon Simple Workflow Service (Amazon SWF)		✓	
Amazon Virtual Private Cloud (Amazon VPC)			✓
Auto Scaling			✓
AWS CloudFormation			✓
AWS Elastic Beanstalk			✓

Product	Free Usage Tier Pricing (For one year)	Has Free Usage Levels	No Additional Charge
AWS Identity and Access Management (IAM)			✓

Note

Usage limitations apply to services on the free usage tier. If you exceed those limitations, you will be charged the normal rate for those services. For details go to [AWS Free Usage Tier](#).

Try Out the Services on the Free Usage Tier

You can get started quickly with the AWS services offered in the free usage tier. The Getting Started Guides for the services introduce you to each service, and they walk you through a simple example to use the service for the first time. The following list provides a short description of what you can do in the free usage tier with each service, along with a link to the related documentation.

- [Amazon CloudWatch Getting Started Guide](#) - Collect, view, and analyze metrics.
- [Amazon DynamoDB Developer Guide](#) - Store and query data items in a fully-managed, scalable, high performance non-relational data store.
- [Amazon Elastic Block Store \(Amazon EBS\)](#) - Create and manage block level storage volumes for use with Amazon EC2 instances.
- [Amazon Elastic Compute Cloud Getting Started Guide](#) - Launch a t1.micro Amazon EC2 instance.
- [Amazon Relational Database Service Getting Started Guide](#) - Launch a single-AZ db.t1.micro Amazon RDS DB Instance (SQL Server Express Edition, MySQL, or Oracle “Bring-Your-Own-License (BYOL)” licensing model).
- [Amazon Simple Email Service Developer Guide](#) - Send email messages.
- [Amazon Simple Notification Service Getting Started Guide](#) - Send and receive HTTP and email notifications from the cloud.
- [Amazon Simple Queue Service Getting Started Guide](#) - Create a queue and then send messages to, and receive them from, the queue.
- [Amazon Simple Storage Service Getting Started Guide](#) - Store and retrieve any amount of data at any time, from anywhere on the web.
- [Amazon Simple Workflow Service Developer Guide](#) – Start, run, and retain workflow executions, as well as schedule tasks, add markers, receive signals, and start timers for those workflow executions.
- [Amazon Virtual Private Cloud Getting Started Guide](#) - Create a virtual network topology—including subnets and routing—for your Amazon EC2 resources.
- [Auto Scaling Getting Started Guide](#) - Launch or terminate EC2 instances automatically based on user-defined policies, schedules, and health checks.
- [AWS CloudFormation User Guide](#) - Create and provision AWS infrastructure deployments predictably and repeatedly.
- [AWS Data Pipeline Developer Guide](#) - Automate the movement and transformation of data. The free tier supports business logic with 5 activities and 3 preconditions.
- [AWS Elastic Beanstalk Developer Guide](#) - Quickly deploy and manage applications in the AWS cloud without worrying about the infrastructure that runs those applications.
- Using IAM - Securely control access to Amazon Web Services and to your account resources.
- [Elastic Load Balancing Getting Started Guide](#) - Improve your application's availability by distributing incoming traffic between two or more Amazon EC2 instances.

Note

AWS also offers 60-day Free Trials for customers that are new to Amazon RDS and Amazon ElastiCache. For more information, go to [Amazon RDS for MySQL and Oracle \(BYOL\) - 60 Day Free Trial](#) and [Amazon ElastiCache - 60 Day Free Trial](#).

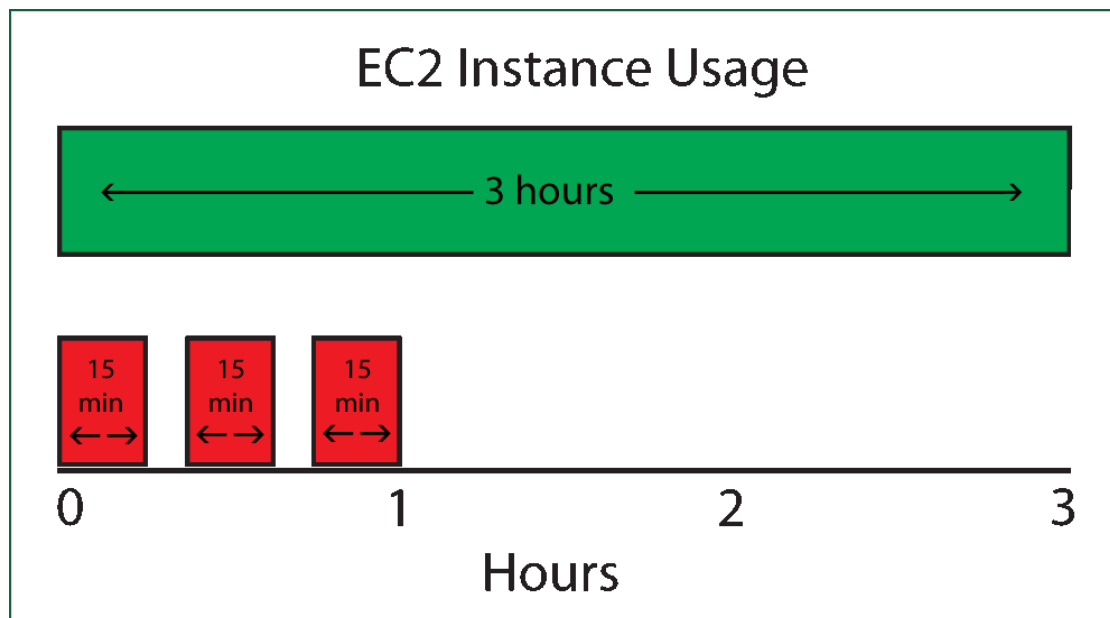
Make the Most of Your Free Monthly Usage

Your free usage does not roll over from month to month; it's a use-it-or-lose-it model. To maximize your benefit from the free usage tier, be sure to spend time each month with AWS, checking out all the services you're curious about.

For some services, such as Amazon EC2, Amazon RDS, Elastic Load Balancing, and Amazon SimpleDB, Amazon tracks your hourly usage. The free usage tier model provides a number of free usage hours per month for these services. For example, the free usage tier pricing model provides 750 usage hours of an Amazon EC2 micro instance per month. (An instance is considered to be running from the time you launch it until the time you terminate it.) You can run one instance continuously for a month, or ten micro instances for 75 hours a month. How you spend your free usage is up to you.

In some cases, leaving your resources running can actually maximize your free-tier usage. For example, if you run an EC2 instance for only a portion of an hour, AWS counts that as an entire hour against your free usage tier usage allotment. If you stop and start an EC2 instance three times in an hour, you'll have used up three hours of your free-tier allotment.

The following chart illustrates how this works. Both the red and green usage scenarios below use up three hours of your monthly free-tier allotment.



If you use AWS resources only intermittently, leaving them running can actually maximize your free-tier usage.

Another place where monitoring your usage is important is in the number of web service requests you make and your outbound Internet data transfer. In order to stay within the free usage tier, you'll need to stay under 15 GB of outbound data transfer. The free usage tier limitations on web service requests vary by product. Details are available on the [AWS Free Usage Tier page](#).

Getting Started with AWS Free Usage Tier Make the Most of Your Free Monthly Usage

Billing alerts enable you 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 e-mail notifications when your charges reach a specified threshold. For more information, go to [Billing Alerts](#).

Launching AWS Services in the Free Usage Tier

Topics

- [Launch an Amazon EC2 Instance \(p. 7\)](#)
- [Deploy a Sample Web Application in the Free Usage Tier \(p. 8\)](#)

This topic provides examples of ways you can get up and running with AWS in the free usage tier. The first part of this topic provides a description of Amazon EC2, which AMIs are available in the free usage tier, and links to information on how to launch an Amazon EC2 instance. The second part of this topic provides a description of AWS Elastic Beanstalk and how you can deploy a sample Java, .NET, Node.js, PHP, Python, or Ruby application using many of the AWS resources in the free usage tier.

Launch an Amazon EC2 Instance

The easiest way to get started with the Amazon free usage tier is to launch a virtual server, which is referred to as an Amazon EC2 instance. Amazon Elastic Compute Cloud (Amazon EC2) is a powerful component of AWS and central to many cloud-based applications. In the free usage tier, you can launch a **micro** Amazon EC2 instance. Micro instances provide a small amount of consistent CPU resources and allow you to burst CPU capacity when additional cycles are available. A micro instance is well suited for lower throughput applications and web sites that consume significant compute cycles only occasionally.

Note

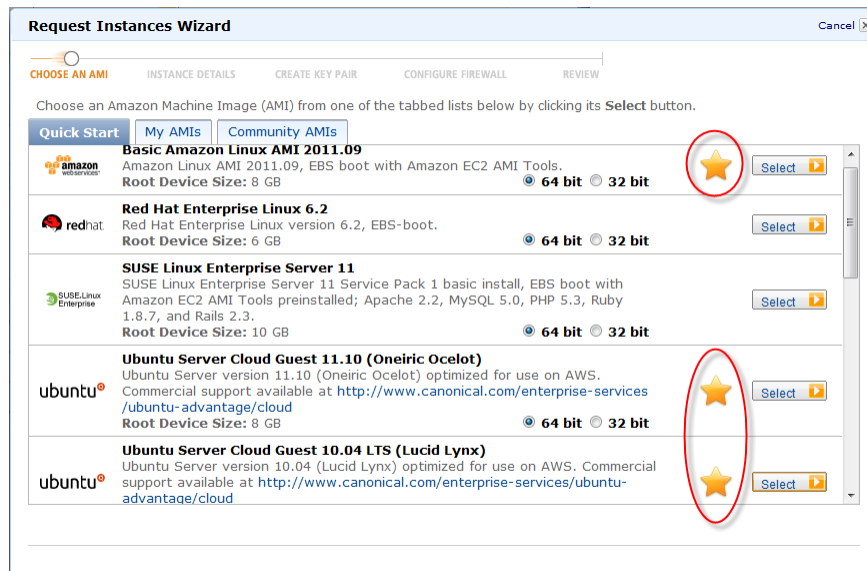
Because of licensing agreements, SUSE and Red Hat Linux AMIs are not available in the free usage tier.

To request an Amazon EC2 instance, you use the Request Instances wizard or the Quick Launch wizard to specify an Amazon Machine Image, or AMI. An AMI contains all the information that AWS needs to create the instance. To keep things simple, AWS marks the AMIs that are available in the free usage tier with a star. For step-by-step instructions on how to launch, connect to, and terminate your Amazon EC2 instance, go to [Launch an Instance](#) in the *Amazon Elastic Compute Cloud Getting Started Guide*. You can also launch Amazon EC2 instances automatically when you deploy a web application using AWS Elastic Beanstalk. For information on deploying a sample web application using AWS Elastic Beanstalk, see [Deploy a Sample Web Application in the Free Usage Tier \(p. 8\)](#).

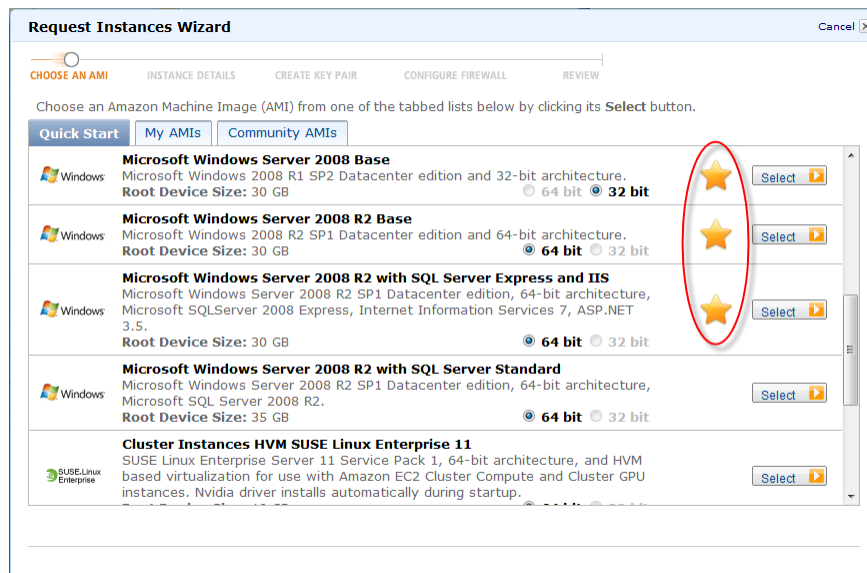
Getting Started with AWS Free Usage Tier

Deploy a Sample Web Application in the Free Usage Tier

The following illustration shows the Amazon Linux AMIs available in the free usage tier using the Classic Wizard.



If you scroll down, you will see the Microsoft Windows AMIs available in the free usage tier.



Deploy a Sample Web Application in the Free Usage Tier

There are many ways you can get your applications up and running using AWS. If you have a Java, .NET, Node.js, PHP, Python, or Ruby application and you want to deploy and manage your application quickly without manually creating the necessary AWS infrastructure, you can use [AWS Elastic Beanstalk](#). You upload your application, and AWS Elastic Beanstalk automatically handles the details of capacity

provisioning, load balancing, scaling, and application health monitoring. AWS Elastic Beanstalk reduces management complexity without restricting choice or control.

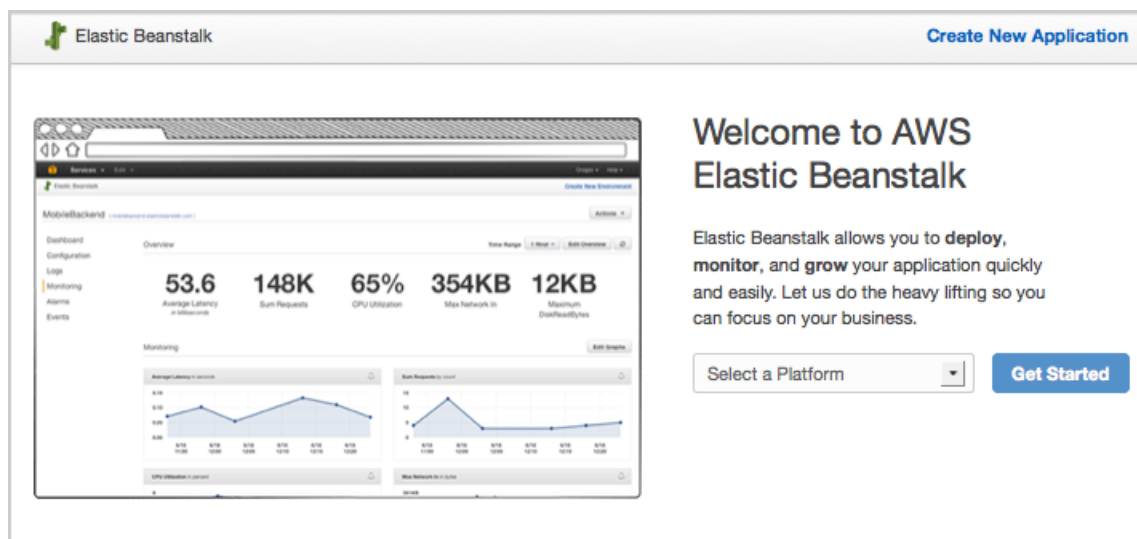
This section explains how to use the AWS Management Console to create a new AWS Elastic Beanstalk application and deploy the application version to a new environment.

Step 1: Create an Application

To demonstrate how AWS Elastic Beanstalk works, we'll create and deploy a sample application.

To create and deploy a sample application

1. Open the AWS Elastic Beanstalk console at <https://console.aws.amazon.com/elasticbeanstalk/>.
2. Select a platform, and click **Get Started**.



To begin the creating the necessary components to run the sample application on AWS resources, AWS Elastic Beanstalk does the following:

- Creates an AWS Elastic Beanstalk application named "My First Elastic Beanstalk Application."
- Creates a new application version labeled "Sample Application" that refers to a default sample application file.
- Launches an environment named "Default-Environment" that provisions the AWS resources to host the application.
- Deploys the "Sample Application" application into the newly created "Default-Environment."

This process may take several minutes to complete.

Step 2: View Application

The AWS Management Console displays information about your application and the environment that is hosting it.

To see the published version of your application

1. In the AWS Elastic Beanstalk console, click the environment that is hosting your application.



- Click the link that appears right after the environment name, in this example: `Default-Environment-kq47wtfazn.elasticbeanstalk.com`.

Default-Environment (Default-Environment-kq47wtfazn.elasticbeanstalk.com)

Actions

Dashboard Overview Refresh

Configuration

Logs Health Running Version Configuration

Monitoring Green Sample Application Python

Alarms Monitor Upload and Deploy Edit

Events Show All

Time	Type	Details
2013-08-13 15:47:36 UTC-0700	INFO	Successfully launched environment: Default-Environment
2013-08-13 15:47:11 UTC-0700	INFO	Adding instance 'i-a4232f90' to your environment.
2013-08-13 15:46:41 UTC-0700	INFO	Added EC2 instance 'i-a4232f90' to Auto Scaling Group 'awseb-e-bctghfqxp-stack-AWSEBAutoScalingGroup-IGD96ZA46PUR'.
2013-08-13 15:44:37 UTC-0700	INFO	Created CloudWatch alarm named: awseb-e-bctghfqxp-stack-AWSEBCloudwatchAlarmHigh-1L10Z13TNXM1F
2013-08-13 15:44:37 UTC-0700	INFO	Created CloudWatch alarm named: awseb-e-bctghfqxp-stack-AWSEBCloudwatchAlarmLow-18HPZ0K06XCPP

The application page opens in a new tab.

Step 3: Change Configuration

You can customize your environment to receive email notifications about important events for your application.

Some configuration changes are simple and happen quickly. Others require that AWS Elastic Beanstalk delete and re-create AWS resources, which can take several minutes. AWS Elastic Beanstalk will warn you about possible application downtime before it changes configuration settings.

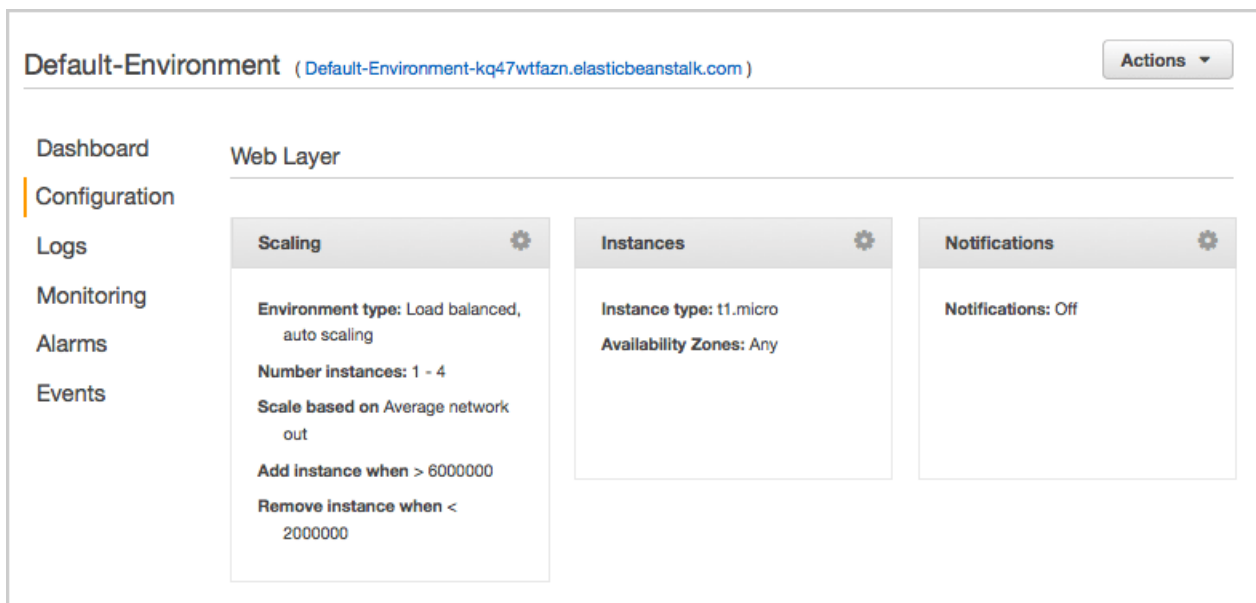
For this example, you will add your email address to receive event notifications.

To change your environment configuration

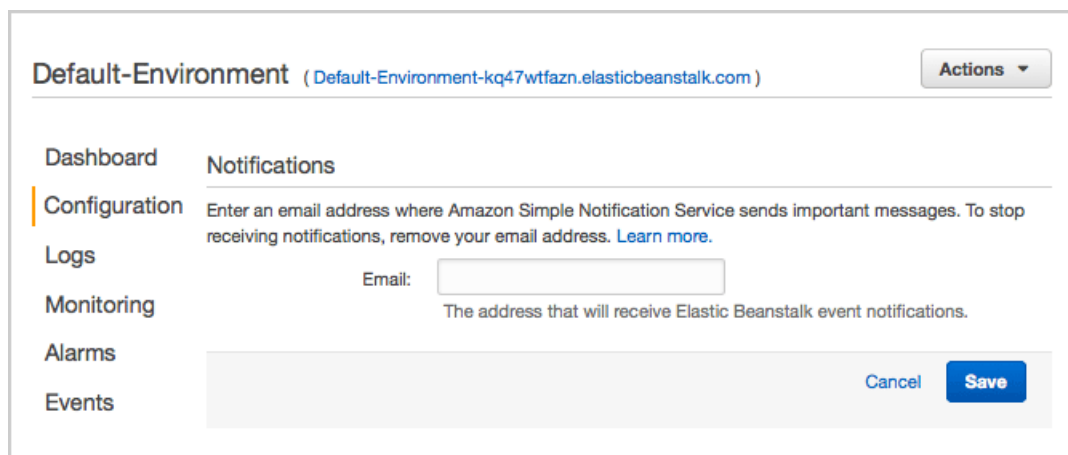
1. In the AWS Elastic Beanstalk console, click the environment that is hosting your application.



2. Click **Configuration**
3. Click the settings gear in the **Notifications** box.



4. In the **Email** box, type your email address, and then click **Save**.



The screenshot shows the AWS Elastic Beanstalk console interface for a 'Default-Environment'. The breadcrumb navigation shows 'Default-Environment (Default-Environment-kq47wtfazn.elasticbeanstalk.com)' with an 'Actions' dropdown. On the left, a sidebar contains links to 'Dashboard', 'Notifications', 'Configuration' (which is highlighted with an orange bar), 'Logs', 'Monitoring', 'Alarms', and 'Events'. The main content area is titled 'Notifications' and contains the text: 'Enter an email address where Amazon Simple Notification Service sends important messages. To stop receiving notifications, remove your email address. [Learn more.](#)'. Below this text is a label 'Email:' followed by a text input field. A descriptive text below the input field reads: 'The address that will receive Elastic Beanstalk event notifications.' At the bottom right of the form are two buttons: 'Cancel' and 'Save'.

Wait for AWS Elastic Beanstalk to update your environment.

Congratulations! You've deployed and made changes to your first sample application using AWS Elastic Beanstalk in the free usage tier.

How AWS Elastic Beanstalk Works

AWS Elastic Beanstalk uses highly reliable and scalable services, which are available in the free usage tier such as the following:

- [Amazon Elastic Compute Cloud \(Amazon EC2\)](#)
- [Amazon Simple Storage Service \(Amazon S3\)](#)
- [Amazon Simple Notification Service \(Amazon SNS\)](#)
- [Amazon CloudWatch](#)
- [Elastic Load Balancing](#)
- [Auto Scaling](#)

For an introduction to some of these services and why they are important, go to [Getting Started with AWS Computing Basics for Windows](#).

You can also directly perform most deployment tasks, such as changing the size of your fleet of Amazon EC2 instances or monitoring your application, from the AWS Elastic Beanstalk web interface. For more information, go to [Changing Environment Configurations Settings](#) in the *AWS Elastic Beanstalk Developer Guide*. By default, AWS Elastic Beanstalk uses the following settings to fit within the free usage tier:

- One t1.micro Amazon EC2 instance. You can control the number of Amazon Elastic Compute Cloud (Amazon EC2) instances that are running at any time by setting the minimum and maximum number of instances for your Auto Scaling group. By default, the minimum is set to one and the maximum is set to four. To ensure that you have only one instance running at any given time, you can set both the minimum and maximum to one. You can also specify the type of instance that you want to run. By default, AWS Elastic Beanstalk is configured to run a t1.micro instance. You can run one t1.micro instance nonstop each month for free within the free usage tier.
- Two Amazon CloudWatch alarms and five metrics. You can add up to 10 alarms and 10 basic metrics (at five-minute intervals) within the free usage tier.
- One Elastic Load Balancer. You can run an Elastic Load Balancer for up to 750 hours per month, which is more than enough to run one load balancer nonstop for one month. The free usage tier covers up to 15 GB of data processed by the load balancer, which will accommodate most small applications. The amount of data processed is dependent on the amount of traffic that hits your site.

- SNS email notification. By default, no email address is configured to receive email notifications when events happen; however, you can configure an email address as described in [Step 3: Change Configuration \(p. 10\)](#), and you can then receive up to 1000 free email notifications each month.
- One Amazon S3 bucket. AWS Elastic Beanstalk creates an Amazon S3 bucket to store your application software. You can also copy log files on an hourly basis to your Amazon S3 bucket, but this capability is disabled by default. To ensure that you stay within the limits of the free usage tier, ensure that your storage, PUT, and GET requests do not exceed the limits. Under the free usage tier, you can use up to 5 GB of Amazon S3 standard storage, 2,000 PUT requests, and 20,000 GET requests.

For more information about account activity usage for AWS Elastic Beanstalk, see the next section, [Tracking Usage of Your AWS Resources \(p. 14\)](#). To learn how to clean up your AWS resources that the sample application uses, go to [Clean Up Your AWS Resources \(p. 24\)](#). Freeing up computing resources within the free usage tier enables you to use those resources to run an application of your own.

Tracking Usage of Your AWS Resources

Topics

- [View Your Account Activity](#) (p. 14)
- [What Happens After the Free Usage Tier Expires?](#) (p. 21)

The AWS free usage tier gives you free access to many services up to specified limits. If you intend to restrict your usage to those limits, you'll want to track your usage of your AWS resources. This chapter will help you understand how to track your usage of your running AWS resources and the costs for the AWS resources used that aren't covered by the free usage tier. It also helps you understand what you would be billed for after the free usage tier expires for the sample AWS Elastic Beanstalk application you deployed in [Deploy a Sample Web Application in the Free Usage Tier](#) (p. 8). For more information about how AWS pricing works, go to [How AWS Pricing Works](#). If you have questions about your account, you can contact Account and Billing support at [Contact Us](#).

You can also setup billing alerts 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 e-mail notifications when your charges reach a specified threshold. For more information, go to [Billing Alerts](#).

View Your Account Activity

You should check your account activity regularly to ensure that any charges are in line with what you expect. Your account activity is updated daily, and you will see a list of charges accrued so far in your current billing cycle. You can also check previous billing cycles.

The summary page provides a summary of all charges and the rates for each AWS product. To see more detailed usage activity, click **Download Usage Report** for each product.

To view your account activity

1. Go to <http://aws.amazon.com/account/>.
2. Click **Account Activity**.
3. Sign in to your AWS account.

Getting Started with AWS Free Usage Tier Amazon Elastic Compute Cloud

Your account summary appears. The following image shows an example bill after deploying the sample AWS Elastic Beanstalk application in the previous example and assuming you have at least one page view a day. You can see in the image that all the services used for this scenario are free after three days of activity.

Expand All Services Collapse All Services		Printer Friendly Version
		Totals
+ Amazon Elastic Compute Cloud	Download Usage Report »	0.00
+ Amazon Simple Notification Service	Download Usage Report »	0.00
+ Amazon Simple Storage Service	Download Usage Report »	0.00
+ AWS Data Transfer (excluding Amazon CloudFront)		0.00
Bill Summary		
Usage charges and monthly recurring fees during this billing cycle† (More Info)		\$0.00
One-time fees during this billing cycle (More Info)		\$0.00
+ Taxes (Estimated Taxes)		\$0.00
Total new charges this billing cycle		\$0.00
No payments received to date.		
Current estimated unpaid balance to be charged for this billing cycle		\$0.00

To better understand your account activity, it helps to break down each product by what is being tracked.

Amazon Elastic Compute Cloud

To look at the breakdown of the Amazon EC2 costs, expand the **Amazon Elastic Compute Cloud** node on the account activity summary.

Getting Started with AWS Free Usage Tier Amazon Elastic Compute Cloud

Expand All Services Collapse All Services		Printer Friendly Version
		Totals
[-] Amazon Elastic Compute Cloud		
US East (Northern Virginia) Region		
Amazon EC2 running Linux/UNIX		
\$0.00 per Micro Instance (t1.micro) instance-hour (or partial hour) under monthly free tier	72 Hrs	0.00
Elastic Load Balancing		
\$0.00 per LoadBalancer-hour (or partial hour) under monthly free tier	71 Hrs	0.00
\$0.00 per GB Data Processed by the LoadBalancer under monthly free tier	0.000382 GB	0.00
Amazon EC2 EBS		
\$0.00 per GB-month of provisioned storage under monthly free tier	0.789 GB-Mo	0.00
\$0.00 per 1 million I/O requests under monthly free tier	136,505 IOs	0.00
Amazon CloudWatch		
\$0.00 per alarm-month - first 10 alarms	0.198 Alarms	0.00
Download Usage Report »		0.00
[+] Amazon Simple Notification Service		
Download Usage Report »		0.00
[+] Amazon Simple Storage Service		
Download Usage Report »		0.00
[+] AWS Data Transfer (excluding Amazon CloudFront)		
		0.00

You can see in the above image, that the following resources are being tracked:

- Amazon EC2 running Linux/UNIX
- Elastic Load Balancing
- Amazon EC2 EBS
- Amazon CloudWatch

Detailed pricing for these resources can be found at <http://aws.amazon.com/pricing/ec2/>.

AWS tracks the number of hours your Amazon EC2 instance is running. The price depends on the type of Amazon EC2 instance and the software it is running. By default, AWS Elastic Beanstalk deploys the sample application to a minimum of one t1.micro instance and a maximum of four instances. To ensure that you stay within the free usage tier, keep the default of t1.micro, and set Auto Scaling so that the minimum number and maximum number of instances are both one. For instructions on how to configure the Auto Scaling settings in AWS Elastic Beanstalk go to [Configuring Auto Scaling](#) in the *AWS Elastic Beanstalk Developer Guide*. You get free usage of t1.micro instances for up to 750 hours per month. At the time of publication for this paper, the price per hour for on-demand instances for a t1.micro in the US East region is \$0.02 per hour. The price varies depending on the region your Amazon EC2 instance is running.

Getting Started with AWS Free Usage Tier Amazon Elastic Compute Cloud

Region: US East (Virginia)		
	Linux/UNIX Usage	Windows Usage
Standard On-Demand Instances		
Small (Default)	\$0.080 per hour	\$0.115 per hour
Large	\$0.320 per hour	\$0.460 per hour
Extra Large	\$0.640 per hour	\$0.920 per hour
Micro On-Demand Instances		
Micro	\$0.020 per hour	\$0.030 per hour

For Elastic Load Balancing, AWS tracks the number of hours your load balancer is running, as well as the data that passes through the load balancer to the Amazon EC2 instance. By default, AWS Elastic Beanstalk creates one load balancer that directs traffic across your Amazon EC2 instances. Under the free usage tier, you get 750 hours and 15 GB of data processing free per month. At the time of publication for this paper, the price per hour in the US East region for a load balancer is \$0.025 and \$0.008 per GB of data processed. The price varies depending on the region where your load balancer is being used.

Region: US East (Virginia)
<ul style="list-style-type: none">▪ \$0.025 per Elastic Load Balancer-hour (or partial hour)▪ \$0.008 per GB of data processed by an Elastic Load Balancer

AWS tracks the amount of provisioned storage per gigabyte for Elastic Block Storage (EBS) volumes and the number of I/O requests to these volumes. In addition, if snapshots of the EBS volume are made to Amazon Simple Storage Service (S3), AWS tracks the amount of storage. With the free usage tier, you get 30 GB of Amazon Elastic Block Storage (EBS) plus 2 million IOs, 1 GB snapshot storage, 10,000 snapshot Get Requests and 1,000 snapshot Put Requests. The pricing page and the following image shows the pricing for Amazon EBS at the time this paper was published. The price varies depending on the region.

Region: US East (Virginia)
Amazon EBS Volumes <ul style="list-style-type: none">▪ \$0.10 per GB-month of provisioned storage▪ \$0.10 per 1 million I/O requests
Amazon EBS Snapshots to Amazon S3 <ul style="list-style-type: none">▪ \$0.14 per GB-month of data stored

AWS tracks the number of Amazon CloudWatch alarms per instance per month as well as the frequency for which the alarms are set. By default, AWS Elastic Beanstalk enables five basic Amazon CloudWatch metrics, which return data in five-minute periods and two Amazon CloudWatch alarms. AWS allows up to 10 alarms, 10 metrics, and 1,000,000 API requests. This offer does not expire after the free usage tier expires. The [Amazon CloudWatch Pricing Page](#) shows the pricing breakdown for Amazon CloudWatch. Current prices are shown in the following image. The price varies depending on the region.

Region: US East (Virginia)

Amazon CloudWatch Detailed Monitoring for Amazon EC2 instances (at one-minute frequency)

- \$3.50 per instance per month (the per metric price below x 7 pre-defined metrics per instance)

Amazon CloudWatch Custom Metrics

- \$0.50 per metric per month

Amazon CloudWatch Alarms

- \$0.10 per alarm per month

Amazon CloudWatch API Requests

- \$0.01 per 1,000 Get, List, or Put requests

This pricing information shows activity for one day. Let's look at what the price would be if you continued to run the sample AWS Elastic Beanstalk application 24 hours a day 7 days a week and continued to visit the web site once a day. Assuming that there are 30 days in a month, we can multiply the metrics by 10 to come up with a total for the month. As the following table shows, such usage would be within the free usage tier.

Resource	3 days usage	30 days usage	Free Usage Tier
Amazon EC2 Instance running Linux/UNIX	72 hours	720 hours	750 hours
Elastic Load Balancing	71 hours 0.000382 GB	710 hours 0.0115 GB	750 hours 15 GB
Amazon EBS	0.789 GB provisioned storage 136,505 IOs	7.89 GB provisioned storage 1,365,050 IOs	30 GB provisioned storage 2,000,000 IOs
Amazon CloudWatch	0.0198 Alarms	0.198	10 Alarms

Amazon Simple Notification Service

To look at the breakdown of the Amazon SNS costs, expand the Amazon SNS costs by expanding the **Amazon Simple Notification Service** node on the account activity summary.

Getting Started with AWS Free Usage Tier Amazon Simple Storage Service

Expand All Services Collapse All Services		Printer Friendly Version
		Totals
+ Amazon Elastic Compute Cloud	Download Usage Report »	0.00
- Amazon Simple Notification Service		
US East (Northern Virginia) Region		
First 100,000 Amazon SNS API Requests per month are free	3 Requests	0.00
First 1,000 Amazon SNS Email/Email-JSON Notifications per month are free	1 Notification	0.00
	Download Usage Report »	0.00
+ Amazon Simple Storage Service	Download Usage Report »	0.00
+ AWS Data Transfer (excluding Amazon CloudFront)		0.00
		0.00

AWS tracks the number of SNS requests, HTTP/HTTPS notifications, and email notifications each month. AWS offers up to 100,000 requests, 100,000 HTTP/HTTPS notifications, and 1,000 email notifications for free always, even after the free usage tier expires. Detailed pricing information is available at <http://aws.amazon.com/pricing/sns>.

The following table shows activity for three days. The requests made were to create and subscribe to the topic, and an email notification was sent to confirm the subscription. The number of requests and notifications can vary depending on the health of the application and the number of topics you subscribe to. As the table shows, the requests and the notifications are well within the limits of the free usage tier.

Resource	3 days usage	30 days usage	Free Usage Tier
Amazon SNS	3 requests 1 email notification	30 requests 10 email notifications	100,000 requests 1,000 email notifications

Amazon Simple Storage Service

To look at the breakdown of the Amazon S3 costs, expand the **Amazon Simple Storage Service** node on the account activity summary.

Getting Started with AWS Free Usage Tier AWS Data Transfer

Expand All Services Collapse All Services		Printer Friendly Version
		Totals
+ Amazon Elastic Compute Cloud	Download Usage Report »	0.00
+ Amazon Simple Notification Service	Download Usage Report »	0.00
- Amazon Simple Storage Service		
US Standard Region		
\$0.00 per request - PUT, COPY, POST, or LIST requests under the monthly global free tier		3 Requests 0.00
	Download Usage Report »	0.00
+ AWS Data Transfer (excluding Amazon CloudFront)		0.00

This pricing information shows activity for three days. The cost is for AWS Elastic Beanstalk to get a list of all the buckets and create the Amazon S3 bucket if it doesn't already exist. AWS Elastic Beanstalk issued a second LIST request to list all the buckets when we added our email address to our environment. Unless you plan to make additional updates to your environment or upload objects to your Amazon S3 bucket, you should not continue to see additional requests.

Resource	3 days usage	30 days usage	Free Usage Tier
Amazon S3	3 PUT requests	3 PUT requests	2000 PUT requests

AWS Data Transfer

To view a breakdown of the data transfer costs, expand the **AWS Data Transfer (excluding Amazon CloudFront)** node on the account activity summary.

Expand All Services Collapse All Services		Printer Friendly Version
		Totals
+ Amazon Elastic Compute Cloud	Download Usage Report »	0.00
+ Amazon Simple Notification Service	Download Usage Report »	0.00
+ Amazon Simple Storage Service	Download Usage Report »	0.00
- AWS Data Transfer (excluding Amazon CloudFront)		
\$0.000 per GB - data transfer out under the monthly global free tier		0.013 GB 0.00
\$0.000 per GB - regional data transfer under the monthly global free tier		0.0000001 GB 0.00
\$0.000 per GB - data transfer in per month		0.004 GB 0.00
		0.00

While you are charged for data transfer out, there is no charge for inbound data transfer or data transfer between other AWS services within the same region. The outbound data transfer is aggregated across Amazon EC2, Amazon S3, Amazon RDS, Amazon SimpleDB, Amazon SQS, Amazon SNS, and Amazon VPC and then charged at the outbound data transfer rate. This charge appears on the monthly statement

Getting Started with AWS Free Usage Tier What Happens After the Free Usage Tier Expires?

as AWS Data Transfer Out. The [Amazon Simple Storage Service \(S3\) Pricing](#) page shows the latest pricing information. The costs shown in the following image are current at the time of publication.

Region: US Standard	
Pricing	
Data Transfer IN	
All data transfer in	\$0.000 per GB
Data Transfer OUT	
First 1 GB / month	\$0.000 per GB
Up to 10 TB / month	\$0.120 per GB
Next 40 TB / month	\$0.090 per GB
Next 100 TB / month	\$0.070 per GB
Next 350 TB / month	\$0.050 per GB
Next 524 TB / month	Contact Us
Next 4 PB / month	Contact Us
Greater than 5 PB / month	Contact Us

This pricing information shows activity for three days. Let's look at what the price would be if you continued to run the sample AWS Elastic Beanstalk application 24 hours a day 7 days a week and visit the web site once a day. Assuming that there are 30 days in a month, we can multiply the metrics by 10 to come up with a total for the month.

Resource	3 days usage	30 days usage	Free Usage Tier
AWS Data Transfer	0.013 GB data transfer out	0.13 GB data transfer out	First GB per month is free
	0.000001 GB regional data transfer	0.00001 GB regional data transfer	First GB regional data transfer
	0.004 GB data transfer in	0.04 GB data transfer in	All data transfer in is free

What Happens After the Free Usage Tier Expires?

After the free usage tier expires, you will be charged at the standard usage rates. To gain a better understanding of what these charges might be, let's use the AWS Elastic Beanstalk sample application and take a look at what the charges would be outside the free usage tier. The best way to do this is to look at your account activity and replace the free usage tier rate with the regular standard usage rates. We'll use the same usage for 30 days that we calculated in the previous sections. Let's break it down again per product.

Standard Rates for Amazon EC2

The following table shows the breakdown of costs for Amazon EC2 for the US East region for 30 days of usage.

**Getting Started with AWS Free Usage Tier
Standard Rates for Amazon SNS**

Resource	Standard Usage Rates	Cost
On-demand Instance running Linux/UNIX	\$0.02 per Micro Instance (t1.micro) instance-hour (or partial hour)	\$14.40
Elastic Load Balancing	\$0.025 per LoadBalancer-hour (or partial hour) \$0.008 per GB Data Processed by the LoadBalancer	\$18.00 \$0.003
Amazon EC2 EBS	\$0.10 per GB-month of provisioned storage \$0.10 per 1 million I/O requests	\$0.80 \$0.20
Amazon CloudWatch	\$0.00 per alarm-month - first 10 alarms	\$0.00 \$0.00
Total Cost		\$33.40

Standard Rates for Amazon SNS

The following table shows the standard usage rates for Amazon SNS in the US East region for 30 days of usage.

Resource	Standard Usage Rates	Cost
Amazon SNS	First 100,000 Amazon SNS API Requests per month are free	\$0.00
Total Cost		\$0.00

Standard Rates for Amazon S3

The following table shows the standard usage rates for Amazon S3 in the US East region for 30 days of usage.

Resource	Standard Usage Rates	Cost
Amazon S3	\$0.01 per 1,000 PUT/COPY/LIST/POST requests	\$0.00
Total Cost		\$0.00

Standard Rates for AWS Data Transfer

The following table shows the standard usage rates for AWS Data Transfer Out across AWS resources in the same availability zone in the same US East region for 30 days of usage.

Resource	Standard Usage Rates	Cost
AWS Data Transfer Out	\$0.000 per GB - first GB of data transfer out is free	\$0.00
AWS Regional Data Transfer	\$0.10 per GB	\$0.00001
AWS Data Transfer In	\$0.000 per GB - data transfer in is free	\$0.00
Total Cost		\$0.00

Sum It All Up

If you add up the individual costs for Amazon EC2, Amazon SNS, Amazon S3, and AWS Data Transfer Out, you can see that the total charges will come to \$33.40 for usage charges for the month when the free usage tier is no longer available to you.

For a list of resources to help you get up to speed with AWS, see [Where To Go Next?](#) (p. 28). If you would like to clean up your AWS resources, see [Clean Up Your AWS Resources](#) (p. 24).

Clean Up Your AWS Resources

In this paper, we have walked through deployment of a sample application that takes advantage of the AWS free usage tier. You should now clean up the resources that the sample application has been using. Doing so will free up computing resources within the free usage tier so that you can use those resources to run an application of your own. If you manually launched an Amazon EC2 instance, you can terminate that instance now. For instructions on how to terminate an Amazon EC2 instance, go to [Terminate Your Instance](#) in the *Amazon ElastiCache User Guide*.

Delete Your AWS Elastic Beanstalk Application and Terminate Its Resources

Verify that you are not using any AWS Elastic Beanstalk resources by reviewing your applications and deleting those you no longer need.

To completely delete the application, you will do the following steps:

- Terminate the environment
- Delete all application versions
- Delete the application

To terminate the environment

1. Open the AWS Elastic Beanstalk console at <https://console.aws.amazon.com/elasticbeanstalk/>.
2. Click on the environment that is hosting your application.



Getting Started with AWS Free Usage Tier

Delete Your AWS Elastic Beanstalk Application and Terminate Its Resources

3. Click **Actions** and then click **Terminate Environment**.

The screenshot shows the AWS Elastic Beanstalk console for a specific environment named 'Default-Environment'. The left sidebar contains navigation links: Dashboard, Configuration, Logs, Monitoring, Alarms, and Events. The main area displays the 'Overview' tab with a green checkmark icon indicating the environment is healthy. Below this, there's a 'Recent Events' table. On the right, an 'Actions' dropdown menu is open, showing options like 'Save Configuration', 'Load Configuration', 'Swap Environment URLs', 'Restart App Server(s)', 'Rebuild Environment', and 'Terminate Environment' (which is highlighted in orange).

Default-Environment (Default-Environment-kq47wtfazn.elasticbeanstalk.com)

Dashboard
Configuration
Logs
Monitoring
Alarms
Events

Overview

Health: **Green**
Running Version: Sample Application
Buttons: Monitor, Upload and Deploy, Edit

Recent Events

Time	Type	Details
2013-08-14 15:04:26 UTC-0700	INFO	Environment update completed successfully.
2013-08-14 15:04:26 UTC-0700	INFO	Successfully deployed new configuration to environment.
2013-08-14 15:04:01 UTC-0700	INFO	Updating environment Default-Environment's configuration settings.
2013-08-14 15:04:00 UTC-0700	INFO	Created SNS Notification Topic. ARN: arn:aws:sns:us-west-2:903644089183:ElasticBeanstalkNotifications-Environment-Default-Environment
2013-08-14 15:03:54 UTC-0700	INFO	Environment update is starting.

4. In the **Terminate Environment** dialog box, click **Terminate**.

The screenshot shows a 'Terminate Environment' dialog box. It features a warning icon and text stating that terminating the environment will make the URL <http://Default-Environment-kq47wtfazn.elasticbeanstalk.com> inaccessible and delete any attached Amazon RDS DB instance. A 'Learn more' link is provided. Below the warning, it asks 'Are you sure you want to terminate the environment Default-Environment?'. At the bottom, there are 'Cancel' and 'Terminate' buttons, with 'Terminate' being a prominent red button.

Terminate Environment

Warning

If you terminate this environment, the URL <http://Default-Environment-kq47wtfazn.elasticbeanstalk.com> will no longer be accessible and any attached Amazon RDS DB instance will be deleted. If you want to save your data, create a snapshot before terminating your environment. [Learn more.](#)

Are you sure you want to terminate the environment Default-Environment?

Buttons: Cancel, Terminate

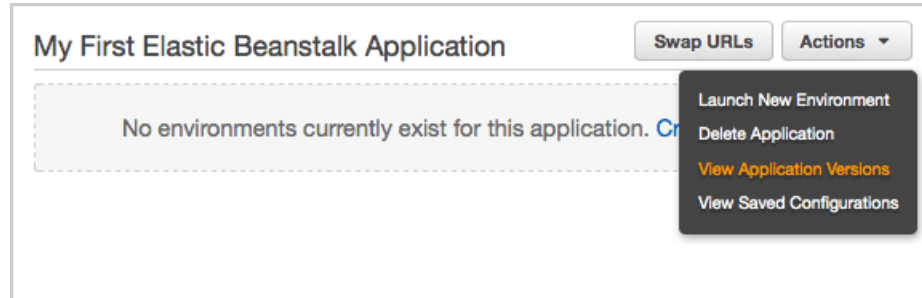
This process may take several minutes to complete.

To delete all application versions

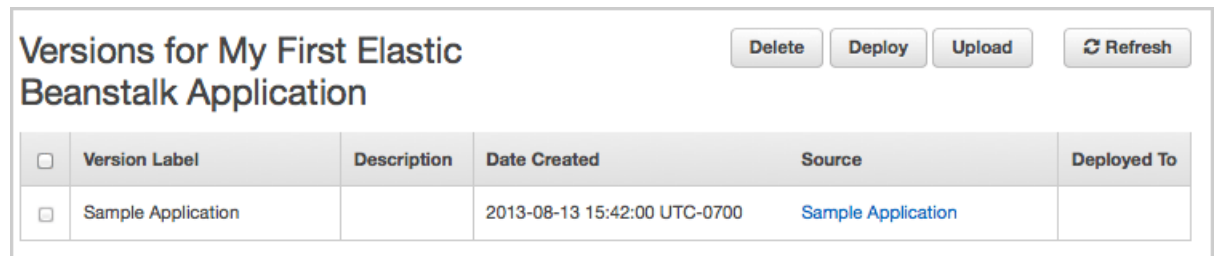
1. In the AWS Elastic Beanstalk console, click **Actions** and then click **View Application Versions**.

Getting Started with AWS Free Usage Tier

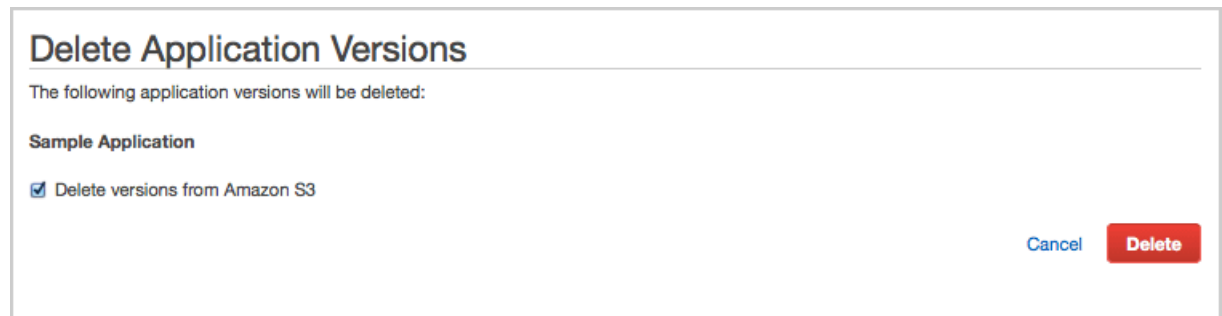
Delete Your AWS Elastic Beanstalk Application and Terminate Its Resources



2. Select the check box next to your application version and then click **Delete**.



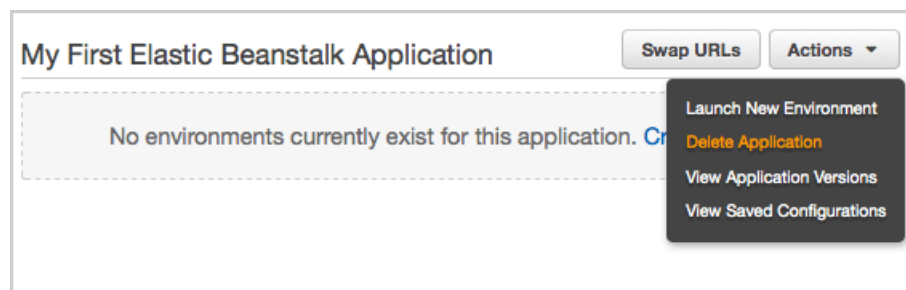
3. In the **Delete Application Version** dialog box, select the **Delete versions from Amazon S3** check box.



4. Click **Delete**.

To delete the application

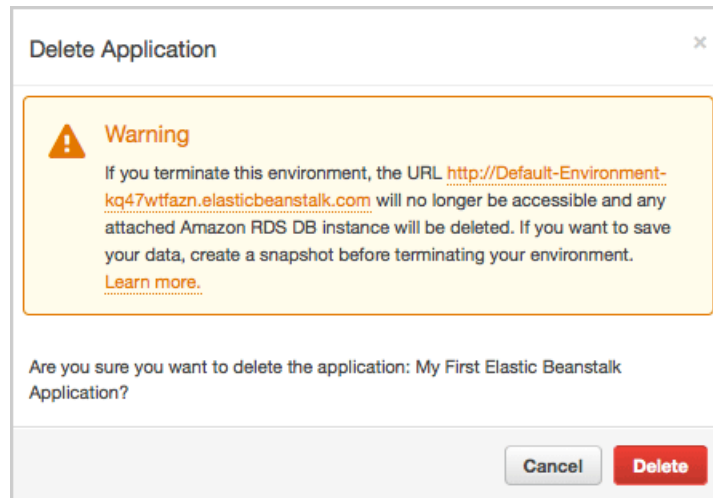
1. In the AWS Elastic Beanstalk console, click **Actions** and then click **Delete Application**



2. In the **Delete Application** dialog box, click **Delete**.

Getting Started with AWS Free Usage Tier

Delete Your AWS Elastic Beanstalk Application and Terminate Its Resources



Where To Go Next?

This section provides you information on where to go next, how to learn more about AWS, how to keep up to date with the latest information, and how to get help.

What's Next?

There are several documents and tools that can help you learn how to get started with AWS, ranging from introductory guides to more advanced guides.

- [Getting Started with AWS](#). Introduces you to AWS and provides examples of what you can do with AWS and how to get started.
- [Hosting Websites on Amazon S3](#) in the *Amazon Simple Storage Service Developer Guide*. Find instructions on how to create a static website using Amazon S3.
- [Deploying a WordPress Blog on Your Amazon EC2 Instance](#) in the *Amazon Elastic Compute Cloud Microsoft Windows Guide*. Find instructions on how to deploy a WordPress Blog on an Windows Amazon EC2 instance.
- **Getting Started Guides: AWS Computing Basics**. The AWS Computing Basics guides introduce you to several key AWS services and components. You learn what these services are, why they are important, and how to use them. The guides provide a simple example architecture and walk you through a deployment that uses this architecture. For Linux, go to [Getting Started with AWS Computing Basics for Linux](#). For Windows, go to [Getting Started with AWS Computing Basics for Windows](#).
- **Getting Started Guides for common use cases**. These getting started guides will show you how to combine various AWS cloud services to build out common use cases or solutions.
- [Documentation](#). Find introductions to each of the Amazon Web Services, advanced service features, API references, and other useful information for all of the AWS products. We recommend that you start with the Getting Started Guide for an overview of the service, and then move on to the more advanced guides.
- **SDKs**. If you are a developer and want to use the SDKs, go to <http://aws.amazon.com/code/>. There are links to the SDKs for [Android](#), [iOS](#), [Java](#), [.NET](#), [PHP](#), and [Ruby](#).

Other Resources

There are other resources available at the AWS website such as tutorials, videos and webinars, training, forums, and technical whitepapers. Visit <http://aws.amazon.com> and click **Developers** to see a list of resources.

Keep Up to Date

AWS is constantly adding new features and services. To keep up to date with what's going on you can get the latest news about AWS from the following websites:

- [Amazon Web Services Blog](#). Get the latest information about new features and services being launched as well as helpful links to resources.
- [What's New](#). Get the latest announcements on all new features and services released.
- [Upcoming Events](#). Check out upcoming events and conferences that AWS will be hosting or participating in.

Get Help

AWS offers a variety of ways to get help for the services ranging from online help to personal support. To see a list of options, go to <http://aws.amazon.com> and click **Support**.