

TASK 2.3

1. I informed by using AWS Free Tier. I'm realize that i can try services such as AWS CodePipeline, AWS Data Pipeline, and AWS Device Farm.

The screenshot shows a Google Chrome browser window with the URL docs.aws.amazon.com/en_us/awsaccountbilling/latest/aboutv2/billing-free-tier.html. The page title is "Using the AWS Free Tier". The left sidebar contains a navigation menu for "AWS Billing and Cost Management" with sections like "What is AWS Billing and Cost Management?", "Getting Help", "Getting Started", and "Using Free Tier". The main content area describes the AWS Free Tier, its benefits, and how to track usage. It includes links to "Eligibility for the Free Tier", "Free Tier Limits", and "Tracking Your Free Tier Usage". A feedback section at the bottom allows users to rate the page and provide comments.

If create AWS Accounts Include 12 Months of Free Tier Access, i can watch the budget via AWS Budgets to track my free tier usage.

The screenshot shows a Google Chrome browser window with the URL docs.aws.amazon.com/en_us/awsaccountbilling/latest/aboutv2/billing-getting-started.html#billing-gs-alerts. The page title is "Step 4: Set Up Budgets to Monitor Your Account". The left sidebar is identical to the previous screenshot. The main content area provides instructions for setting up budgets to monitor free tier usage. It lists steps from 1 to 9, detailing the process of creating a budget, choosing a period, and setting a budgeted amount. To the right of the main content, there is a sidebar titled "On this page" which lists other steps in the process: Step 1: Review Your Usage, Step 2: Turn on Reports, Step 3: Download or Print Your Bill, Step 4: Set Up Budgets to Monitor Your Account (which is currently selected), and Step 5: Get Answers to Questions About Your Bill.

2 Launch a Linux Virtual Machine

The screenshot shows the AWS Management Console interface. On the left, there's a sidebar with various service icons and links like 'Console Home', 'IAM', 'Billing', and 'AWS Support'. The main area is titled 'Services' and contains a grid of service icons. The services listed include Compute (EC2, Lambda, Batch, Elastic Beanstalk, Serverless Application Repository, AWS Outposts, EC2 Image Builder), Blockchain (Amazon Managed Blockchain), Analytics (Athena, EMR, CloudSearch, Elasticsearch Service, Kinesis, QuickSight, Data Pipeline, AWS Data Exchange, AWS Glue, AWS Lake Formation, MSK), End User Computing (WorkSpaces, AppStream 2.0, WorkDocs, WorkLink), Storage (S3, EFS, FSx, S3 Glacier, Storage Gateway, AWS Backup), Management & Governance (AWS Organizations, CloudWatch, AWS Auto Scaling, CloudFormation, CloudTrail, Config, OpsWorks, Service Catalog, Systems Manager, AWS AppConfig, Trusted Advisor, Control Tower, AWS License Manager, AWS Well-Architected Tool, Personal Health Dashboard, AWS Chatbot, Launch Wizard, AWS Compute Optimizer), Security, Identity, & Compliance (IAM, Resource Access Manager, Cognito, Secrets Manager, GuardDuty, Inspector, Amazon Macie, AWS Single Sign-On, Certificate Manager, Key Management Service, CloudHSM, Directory Service, WAF & Shield, AWS Firewall Manager, Artifact, Security Hub, Detective), Internet of Things (IoT Core, FreeRTOS, IoT 1-Click, IoT Analytics, IoT Device Defender, IoT Device Management, IoT Events, IoT Greengrass, IoT SiteWise, IoT Things Graph), Game Development (Amazon GameLift), Containers (Elastic Container Registry, Elastic Container Service, Elastic Kubernetes Service), and Migration & Transfer (AWS Migration Hub). A search bar at the top says 'Find a service by name or feature (for example, EC2, S3 or VM, storage)'. On the right, there are several promotional banners for AWS services.

The screenshot shows the Amazon Lightsail control panel. At the top, there are links for 'Amazon Lightsail', 'Home', 'Docs', 'Search', 'Account', 'AWS Billing', and a 'Create instance' button. Below that, a message says 'Good afternoon!' and there's a search bar with the placeholder 'Filter by name, location, tag, or type'. The main area displays three running instances: 'WordPress-2' (512 MB RAM, 1 vCPU, 20 GB SSD, Oregon, Zone B), 'WordPress-1' (512 MB RAM, 1 vCPU, 20 GB SSD, Oregon, Zone A), and 'WordPress-LL'. Each instance has a status icon, a delete button, and a more options button. Below the instances, there are tabs for 'Instances', 'Databases', 'Networking', 'Storage', and 'Snapshots', and a 'Sort by Date' dropdown.

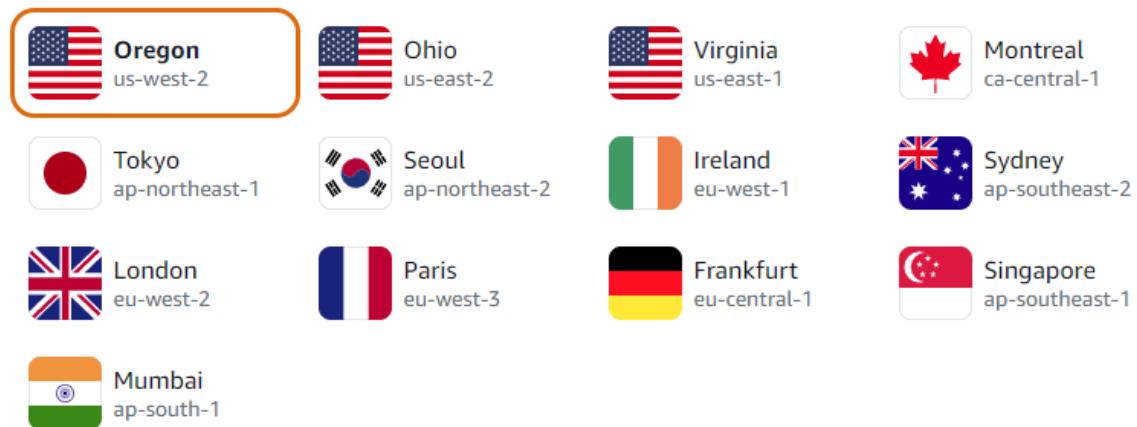
Choose Change Region and Availability Zone to create your instance in another location

Select your instance location

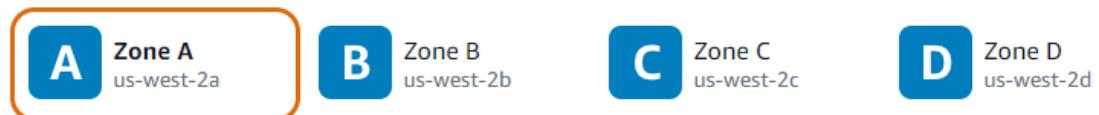
Select a Region

The closer your instance is to your users, the less latency they will experience.

[Learn more about Regions](#)



Select an Availability Zone [?](#)



Choose Linux/Unix platform option

Pick your instance image [?](#)

Select a platform



Select a blueprint

Apps + OS

OS Only



Amazon Linux
2018.03.0.202...



Ubuntu
16.04 LTS



Ubuntu
18.04 LTS



Debian
8.7



Debian
9.5



FreeBSD
12



openSUSE
15.1



CentOS
7 1901-01

Add launch script

You can add a shell script that will run on your instance the first time it launches.

Add launch script

Launch script

You can enter user data to configure the instance type you've chosen.

Enter your setup code here.

Change SSH key pair

You are using the **default** SSH key pair for connecting to your instance.

 [Change SSH key pair](#)

SSH key pair manager

Select, create, or upload the key pair you would like to use to SSH into your instance.

[Create New](#)  [Upload New](#) 

 Default 	Download 
 MyKey1	
 MyKey2	

Enable Automatic Snapshots

Automatic snapshots create a backup image of your instance and attached disks on a daily schedule.

[Enable Automatic Snapshots](#)

Choose a time of day when you'd like us to attempt your snapshot:

00:00 	Coordinated Universal Time (GMT+0) 
---	--

Choose your instance plan.

Choose your instance plan [?](#)

New! Check out our new 16 GB and 32 GB RAM bundles!

Sort by: [Price per month](#) [Memory](#) [Processing](#) [Storage](#) [Transfer](#)

First month free!					
	\$3.5 USD	\$5 USD	\$10 USD	\$20 USD	\$40 USD
\$3.50 USD	\$5 USD	\$10 USD	\$20 USD	\$40 USD	Price per month
512 MB	1 GB	2 GB	4 GB	8 GB	Memory
1 vCPU	1 vCPU	1 vCPU	2 vCPUs	2 vCPUs	Processing
20 GB SSD	40 GB SSD	60 GB SSD	80 GB SSD	160 GB SSD	Storage
1 TB	2 TB	3 TB	4 TB	5 TB	Transfer

You can try the selected plan free for one month (up to 750 hours).

Enter a name for your instance.

Identify your instance

Your Lightsail resources must have unique names.

Amazon_Linux-1

x

1

(Optional) Choose one of the following options to add tags to your instance:

TAGGING OPTIONS

Use tags to filter and organize your resources in the Lightsail console. Key-value tags can also be used to organize your billing, and to control access to your resources.

[Learn more about tagging.](#)

Key-only tags [?](#)

Enter a tag key

Add a tag key and press **Enter**.

Key-value tags [?](#)

 [Add key-value tag](#)

Key

Tag key (e.g., Project)

Value

Tag value (e.g., Blog)

X

Choose Create instance.

Create instance

Connect your instance

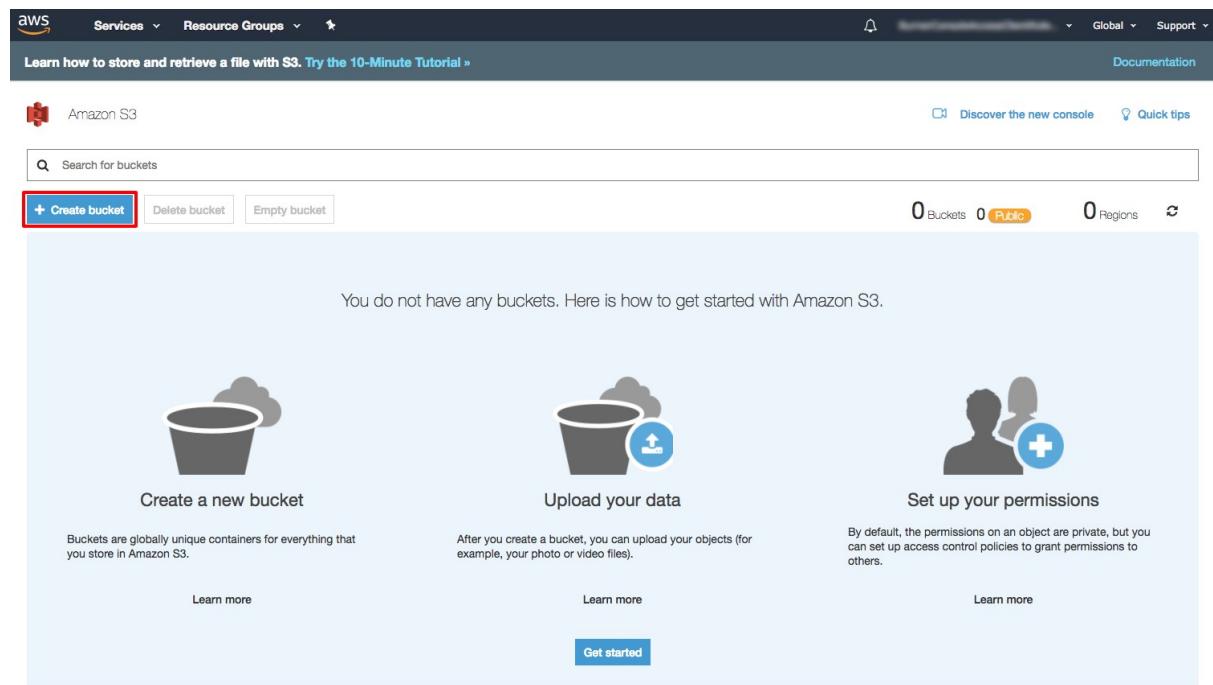


3.1. Store and Retrieve a File

The screenshot shows the AWS Management Console home page. At the top, there's a navigation bar with several tabs and links. Below it is a sidebar with a dark background containing icons for various services like IAM, S3, Lambda, and CloudWatch. The main content area is titled "AWS services" and features several sections:

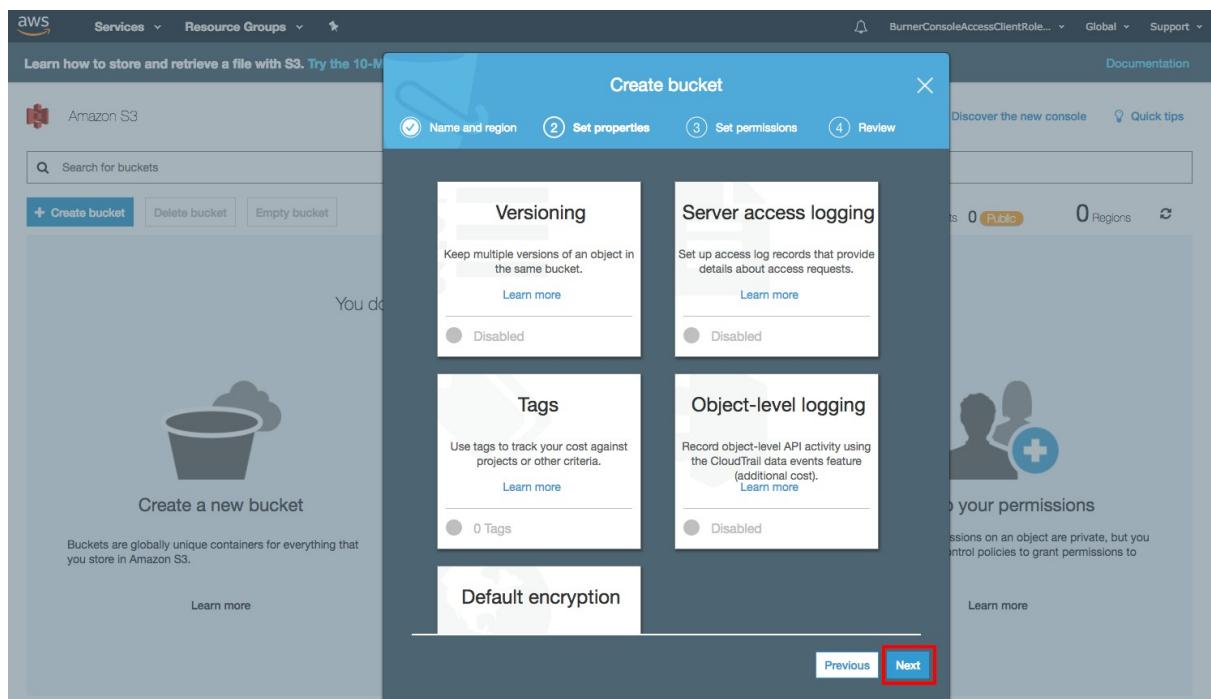
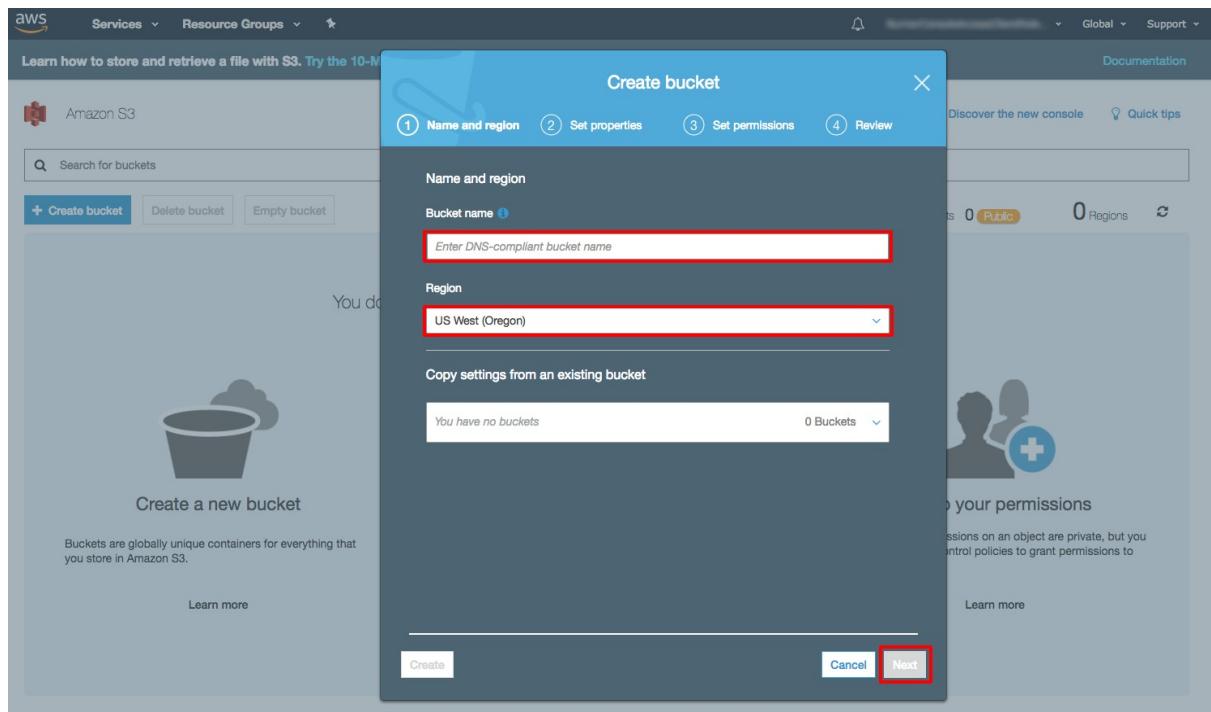
- Find Services**: A search bar where you can enter service names or keywords.
- Recently visited services**: Shows links to IAM and Billing.
- All services**: A link to view all available AWS services.
- Build a solution**: A section with various quick-start guides:
 - Launch a virtual machine**: With EC2, 2-3 minutes, icon of a server.
 - Build a web app**: With Elastic Beanstalk, 6 minutes, icon of a cloud with a person.
 - Build using virtual servers**: With Lightsail, 1-2 minutes, icon of a server with a monitor.
 - Register a domain**: With Route 53, 3 minutes, icon of a shield with the number 53.
 - Connect an IoT device**: With AWS IoT, 5 minutes, icon of a device with a gear.
 - Start migrating to AWS**: With CloudEndure Migration, 1-2 minutes, icon of a cloud with arrows.
 - Start a development project**: With CodeStar, 5 minutes, icon of a developer keyboard.
 - Deploy a serverless microservice**: With Lambda, API Gateway, 2 minutes, icon of a server with code brackets.
- Learn to build**: A section for deploying solutions through step-by-step guides, labs, and videos.
- Access resources on the go**: Information about the AWS Mobile App.
- Explore AWS**: Links to Amazon CloudWatch, Amazon EFS Infrequent Access, Amazon EMR, and Amazon SageMaker Studio.
- Have feedback?**: A section for submitting feedback.

3.2. create an Amazon S3 *bucket*.

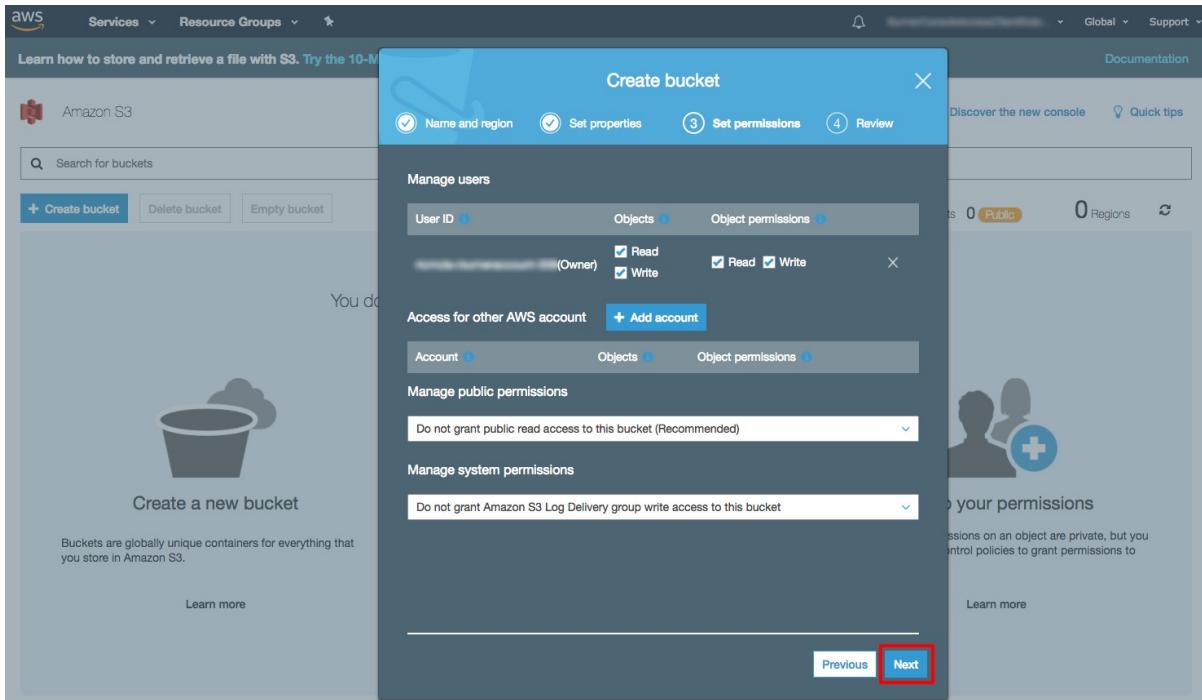


The screenshot shows the AWS S3 service page. At the top, there's a navigation bar with links for Services, Resource Groups, Global, and Support. Below the navigation is a banner with the text "Learn how to store and retrieve a file with S3. Try the 10-Minute Tutorial »" and a "Documentation" link. The main content area has a title "Amazon S3" and a search bar labeled "Search for buckets". Below the search bar are three buttons: "+ Create bucket" (highlighted with a red box), "Delete bucket", and "Empty bucket". To the right of these buttons are statistics: "0 Buckets" (with a "Public" button), "0 Regions", and a refresh icon. A message states "You do not have any buckets. Here is how to get started with Amazon S3." Below this message are three sections: "Create a new bucket" (illustrated with a bucket icon), "Upload your data" (illustrated with a bucket and upload icon), and "Set up your permissions" (illustrated with two user icons). Each section includes a "Learn more" link and a "Get started" button.

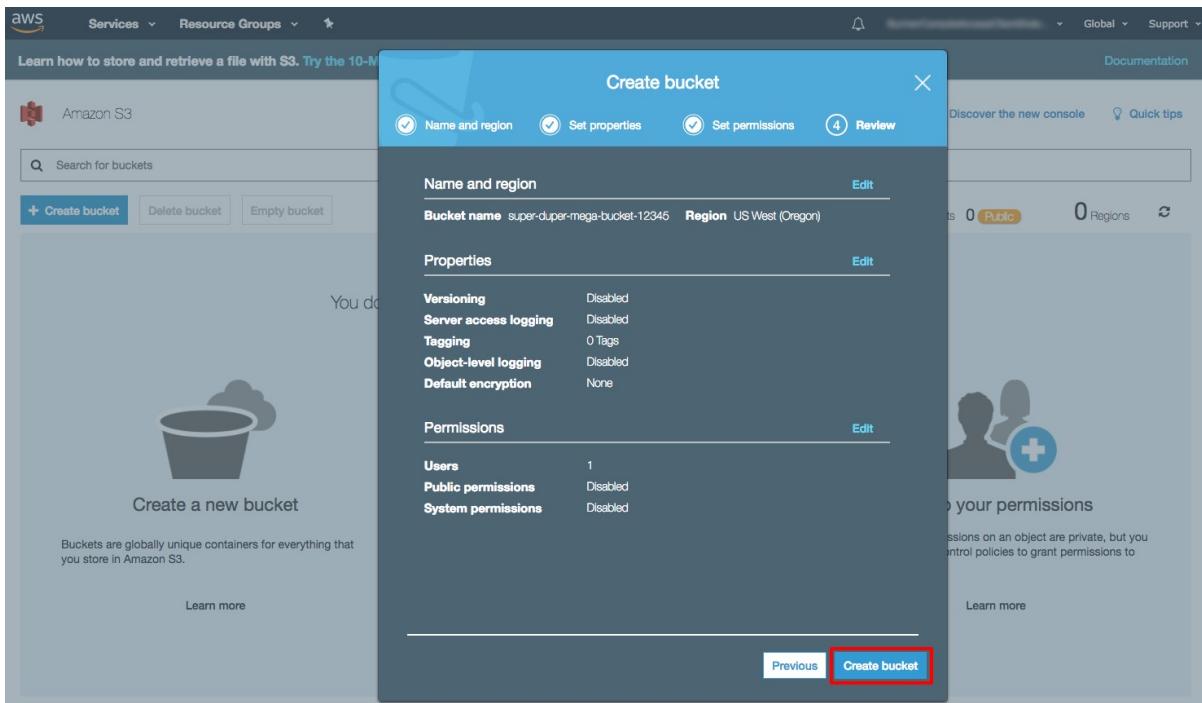
Enter a bucket name.



You have the ability to set permission settings for your S3 bucket.



select Create bucket.



3.3. Upload file

The screenshot shows the AWS S3 service page. At the top, there's a navigation bar with the AWS logo, 'Services' dropdown, 'Resource Groups' dropdown, a bell icon, 'Global' dropdown, and 'Support' dropdown. Below the navigation is a banner with the text 'Learn how to store and retrieve a file with S3. Try the 10-Minute Tutorial »' and a 'Documentation' link.

The main content area is titled 'Amazon S3'. It features a search bar labeled 'Search for buckets' and three buttons: '+ Create bucket', 'Delete bucket', and 'Empty bucket'. To the right, there are summary statistics: '1 Buckets' (with one highlighted in orange), '0 Public', '1 Regions', and a refresh icon.

A table lists the single bucket details:

Bucket name	Access	Region	Date created
super-duper-mega-bucket-12345	Not public *	US West (Oregon)	Nov 24, 2017 2:22:09 PM

* Objects might still be publicly accessible due to object ACLs. Learn more

Select Upload.

The screenshot shows the AWS S3 console interface. At the top, there's a navigation bar with the AWS logo, 'Services' dropdown, 'Resource Groups' dropdown, a bell icon, 'Global' dropdown, and 'Support' dropdown. Below the navigation is a breadcrumb trail: 'Amazon S3 > super-duper-mega-bucket-12345'. A horizontal menu bar contains four tabs: 'Overview' (selected), 'Properties', 'Permissions', and 'Management'. Underneath the menu, there are three buttons: 'Upload' (highlighted with a red box), '+ Create folder', and 'More'. To the right of these buttons is the region 'US West (Oregon)' and a refresh icon. The main content area has a light blue background. It displays the message 'This bucket is empty. Upload new objects to get started.' Below this message are three sections: 'Upload an object' (with an icon of a bucket and a file), 'Set object properties' (with an icon of two user profiles and a plus sign), and 'Set object permissions' (with an icon of two stacked databases and a gear). Each section includes a brief description and a 'Learn more' link. At the bottom center of the main content area is a blue 'Get started' button.

Upload

Properties

Permissions

Management

US West (Oregon)

This bucket is empty. Upload new objects to get started.

Upload an object

Set object properties

Set object permissions

Buckets are globally unique containers for everything that you store in Amazon S3.

After you create a bucket, you can upload your objects (for example, your photo or video files).

By default, the permissions on an object are private, but you can set up access control policies to grant permissions to others.

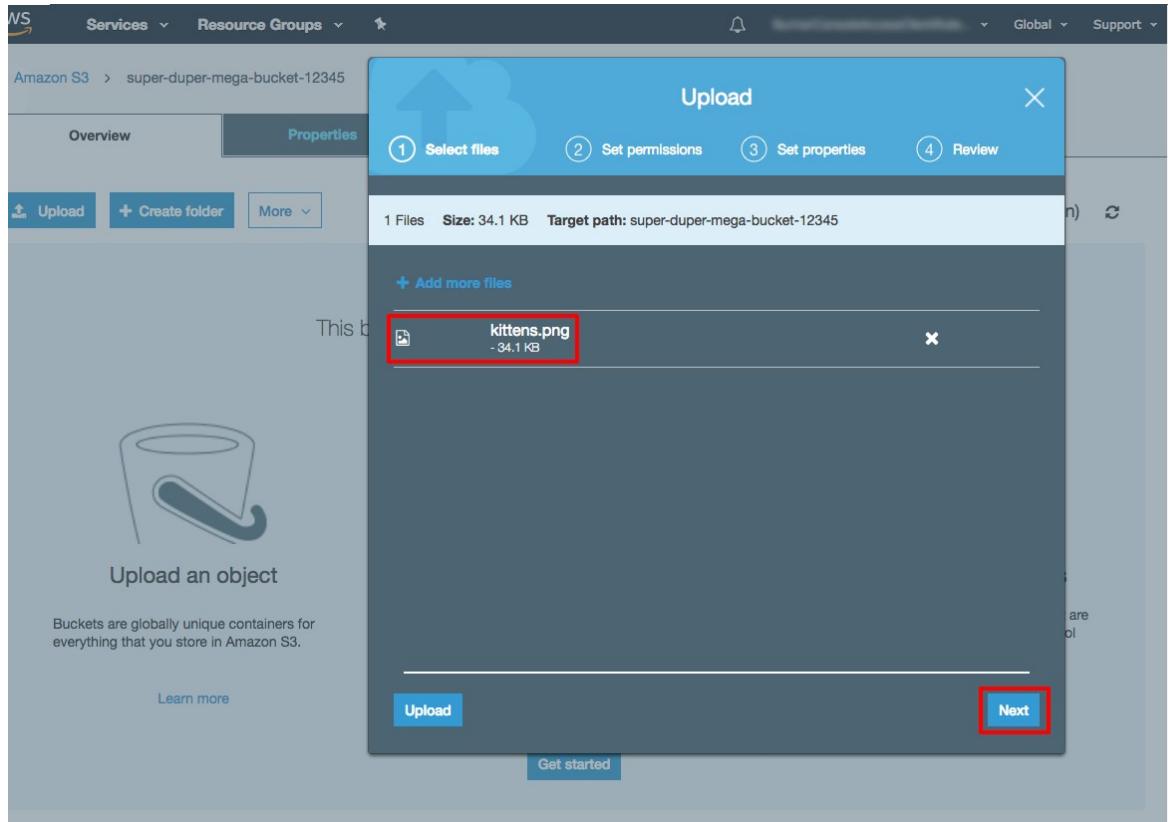
Learn more

Learn more

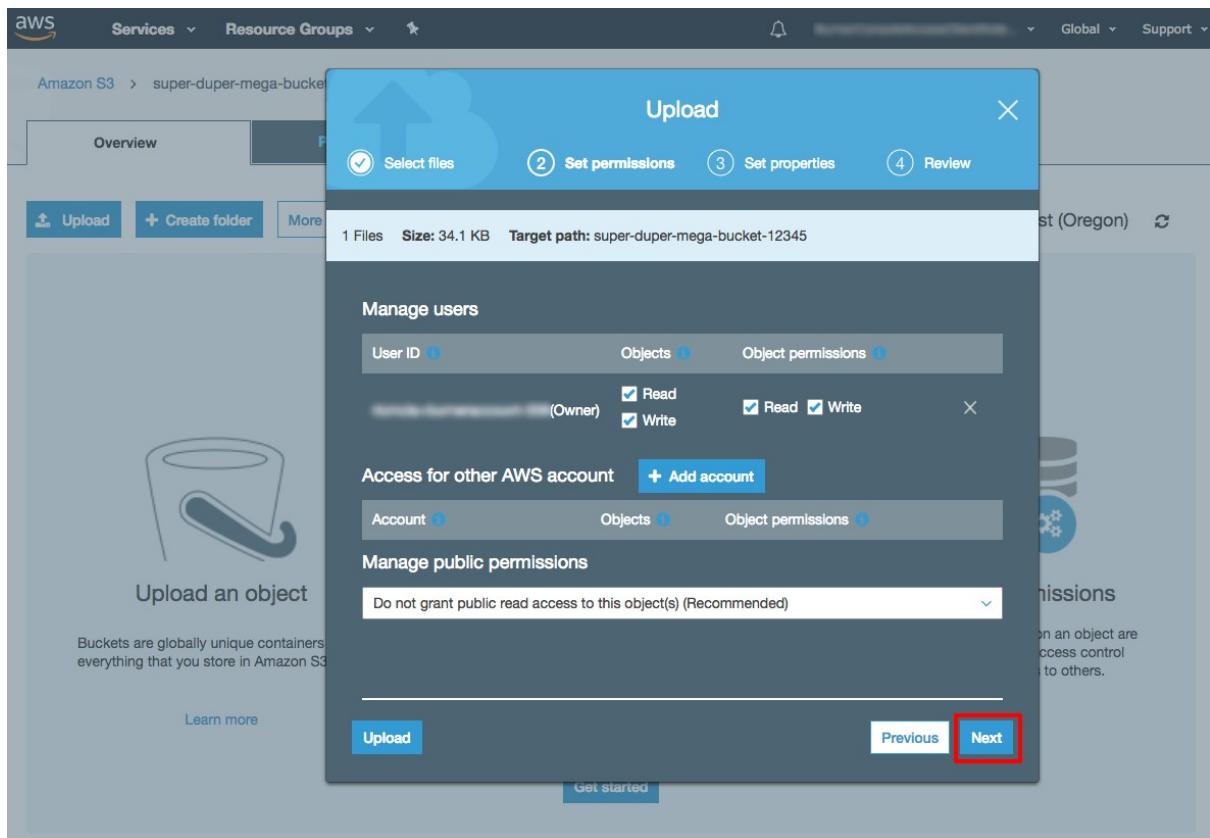
Learn more

Get started

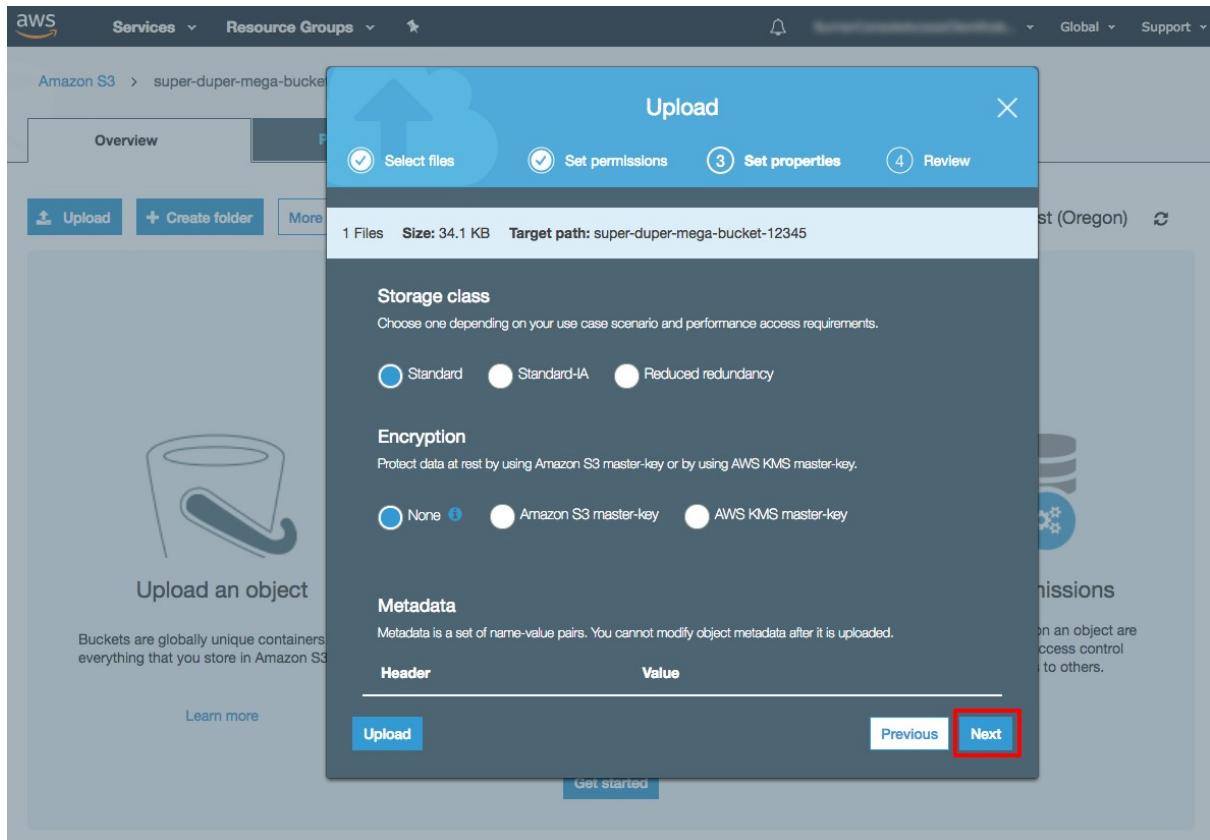
click Add files



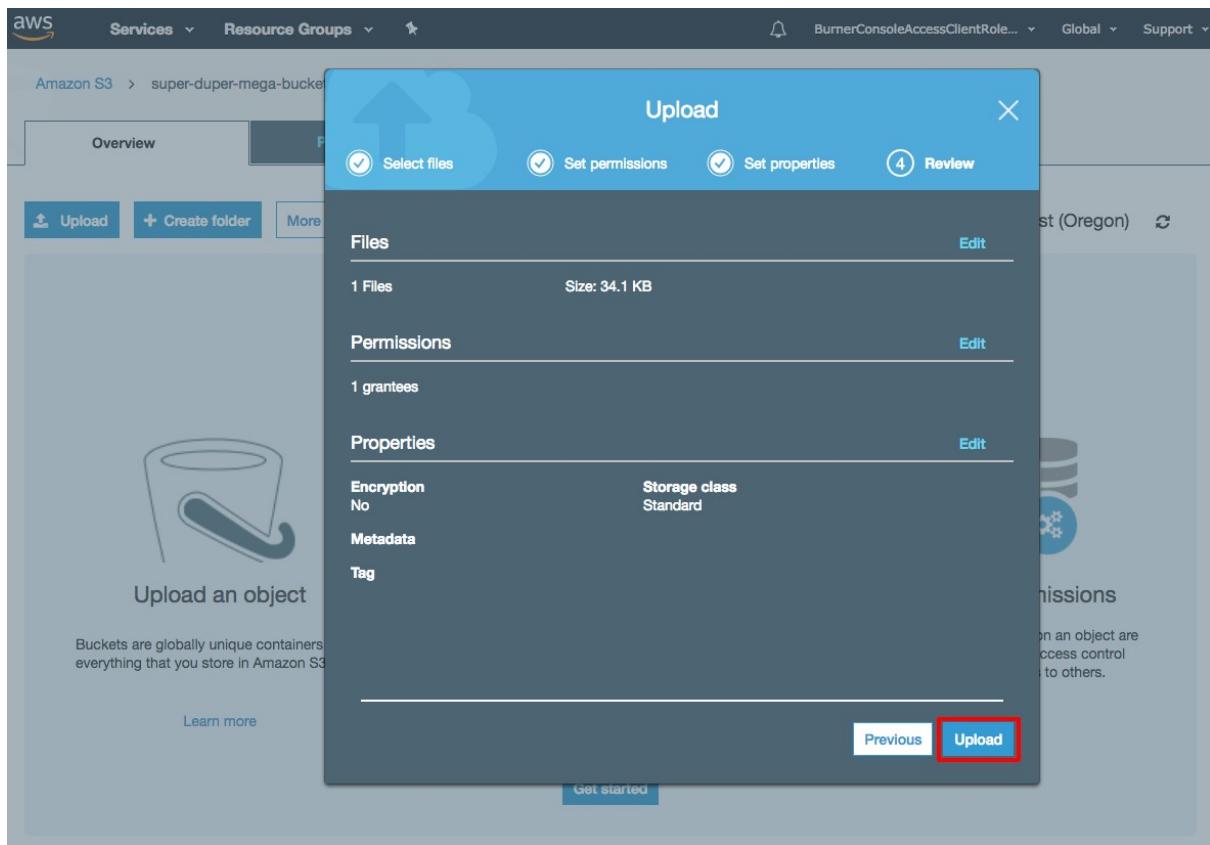
select Next.



select Next

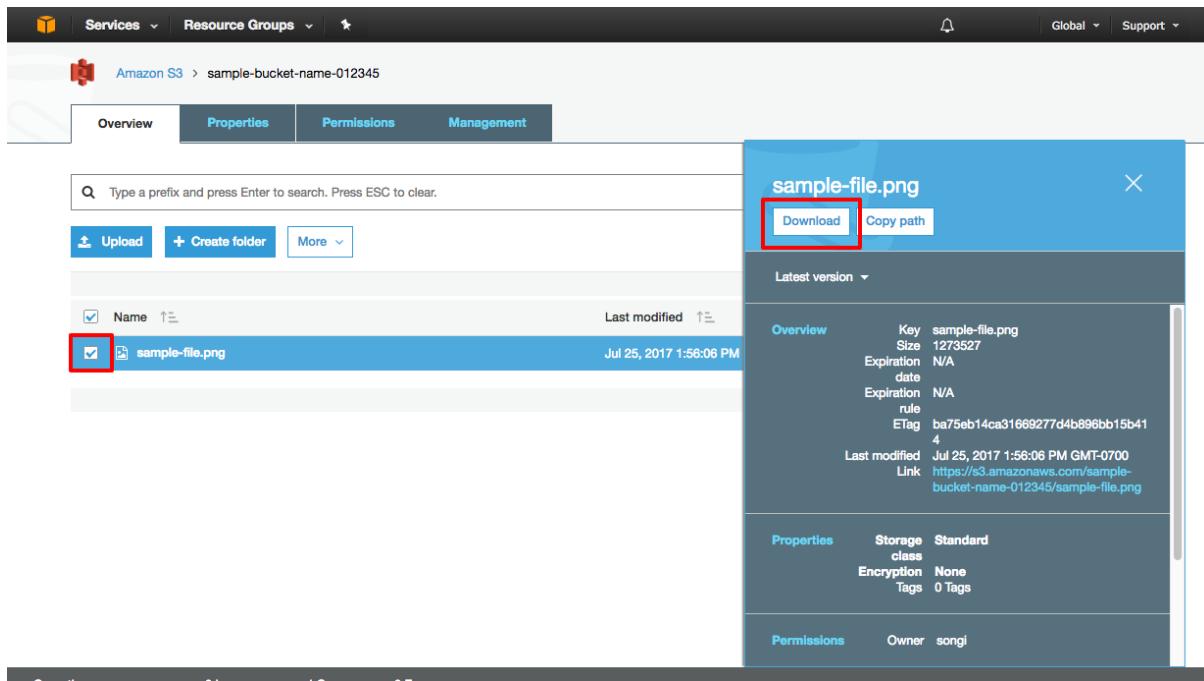


Upload



3.4 Retrieve the Object

select Download.



The screenshot shows the Amazon S3 console interface. At the top, there are navigation links for Services, Resource Groups, Global, and Support. Below the header, the path 'Amazon S3 > sample-bucket-name-012345' is displayed. The main area has tabs for Overview, Properties (which is selected), Permissions, and Management. A search bar and buttons for Upload, Create folder, and More are present. On the left, a list of objects shows 'sample-file.png' selected (indicated by a checked checkbox). The right side displays the properties of the selected file. A modal window for 'sample-file.png' is open, showing the file's key information: Name: sample-file.png, Last modified: Jul 25, 2017 1:56:06 PM. The modal also contains a 'Download' button, which is highlighted with a red box. Other buttons in the modal include 'Copy path'. The modal is titled 'sample-file.png' and has a close button 'X'.

Latest version	
Overview	Key sample-file.png Size 1273527 Expiration N/A Expiration rule N/A ETag ba75eb14ca31669277d4b896bb15b41 4 Last modified Jul 25, 2017 1:56:06 PM GMT-0700 Link https://s3.amazonaws.com/sample-bucket-name-012345/sample-file.png
Properties	Storage class Standard Encryption None Tags 0 Tags
Permissions	Owner songi

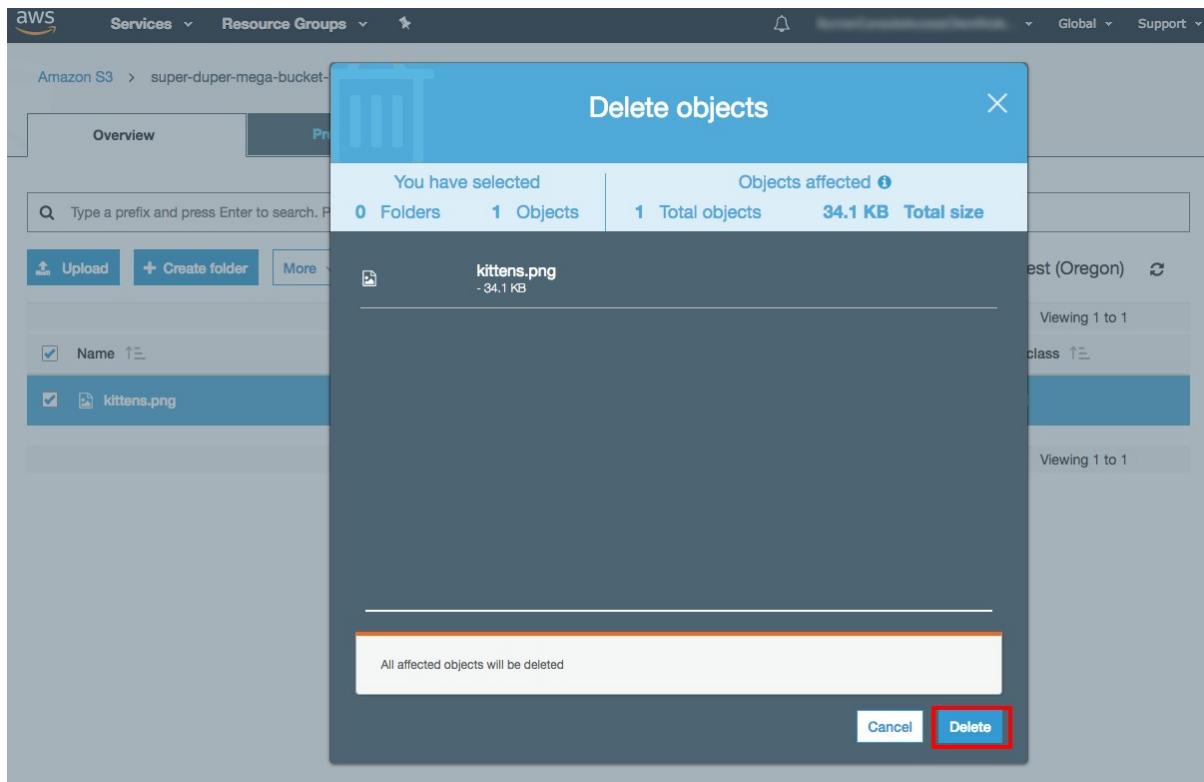
3.5 Delete the Object and Bucket

select More > Delete.

The screenshot shows the AWS S3 console interface. At the top, there's a navigation bar with 'Services', 'Resource Groups', and other global settings. Below it, the path 'Amazon S3 > super-duper-mega-bucket-12345' is shown. The main area has tabs for 'Overview', 'Properties', 'Permissions', and 'Management'. The 'Management' tab is currently active. A search bar at the top says 'Type a prefix and press Enter to search. Press ESC to clear.' On the left, there are buttons for 'Upload' and '+ Create folder'. A file named 'kittens.png' is selected, indicated by a blue border and a checked checkbox. A context menu is open over this file, with the 'More' option expanded. The 'Delete' option in this menu is highlighted with a red box. The main content area shows a table with one item: 'kittens.png', last modified on Nov 24, 2017 at 4:23:11 PM GMT-0800, with a size of 34.1 KB and a storage class of Standard. The table has columns for 'Last modified', 'Size', and 'Storage class'.

Last modified	Size	Storage class
Nov 24, 2017 4:23:11 PM GMT-0800	34.1 KB	Standard

Select Delete.



Click on Amazon S3 to view all your buckets in the region.

The screenshot shows the AWS S3 bucket creation interface. At the top, the navigation bar includes the AWS logo, Services dropdown, Resource Groups dropdown, a bell icon, Global dropdown, and Support dropdown. The main header shows "Amazon S3 > super-duper-mega-bucket-12345". Below the header is a navigation bar with tabs: Overview (selected), Properties, Permissions, and Management. Underneath this is a secondary navigation bar with buttons for Upload, Create folder, and More. To the right of the secondary navigation bar is the region "US West (Oregon)" and a refresh icon. The main content area displays the message "This bucket is empty. Upload new objects to get started." Below this are three sections: "Upload an object" (with an icon of a bucket and a file), "Set object properties" (with an icon of two people and a plus sign), and "Set object permissions" (with an icon of three cylinders and a gear). Each section has a "Learn more" link and a "Get started" button. The "Get started" button is located at the bottom center of the main content area.

Amazon S3 > super-duper-mega-bucket-12345

Overview Properties Permissions Management

Upload Create folder More

US West (Oregon)

This bucket is empty. Upload new objects to get started.

Upload an object

Buckets are globally unique containers for everything that you store in Amazon S3.

[Learn more](#)

Set object properties

After you create a bucket, you can upload your objects (for example, your photo or video files).

[Learn more](#)

Set object permissions

By default, the permissions on an object are private, but you can set up access control policies to grant permissions to others.

[Learn more](#)

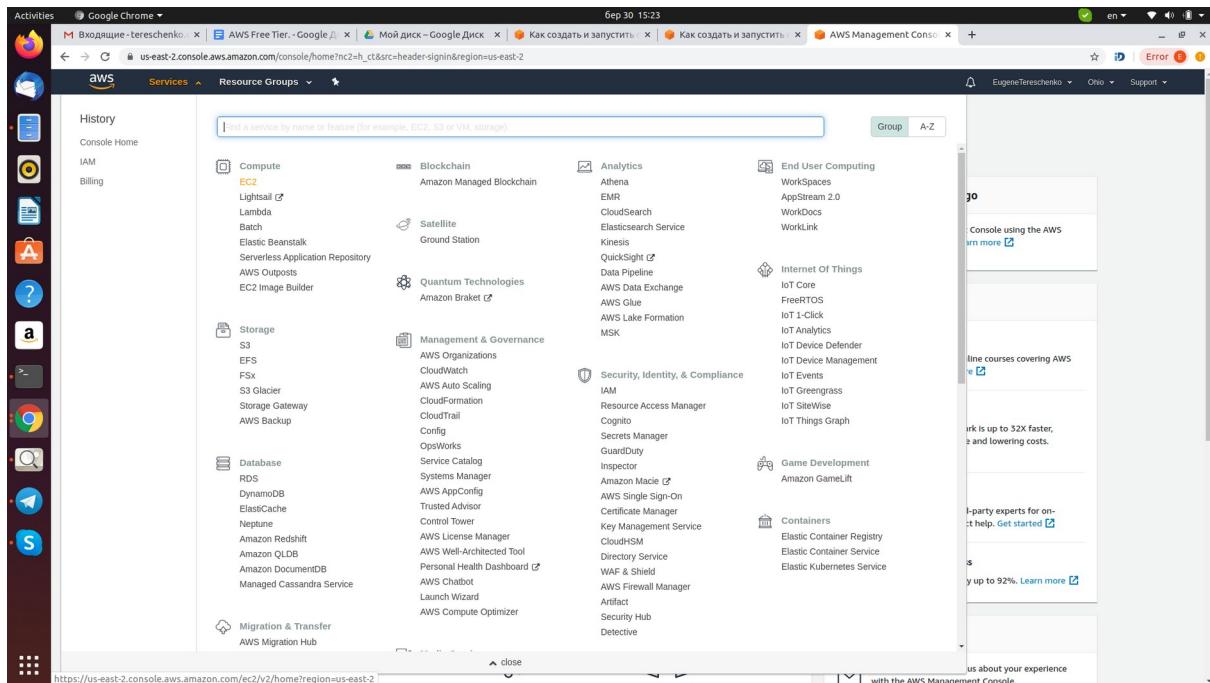
Get started

click Confirm.

The screenshot shows the AWS S3 console interface. At the top, there's a navigation bar with the AWS logo, 'Services' dropdown, 'Resource Groups' dropdown, a bell icon, 'Global' dropdown, and 'Support' dropdown. Below the navigation bar, a banner reads 'Learn how to store and retrieve a file with S3. Try the 10-Minute Tutorial »' and 'Documentation'. The main area is titled 'Amazon S3'. On the left, there's a search bar labeled 'Search for buckets' with a magnifying glass icon. Below the search bar are three buttons: '+ Create bucket' (blue), 'Delete bucket' (red box), and 'Empty bucket' (light blue). To the right, it shows '1 Buckets' (blue), '0 Public' (orange), '1 Regions' (blue), and a refresh icon. Under the heading 'Bucket name' is a table with one row. The row contains: 'super-duper-mega-bucket-12345' (with a trash bin icon), 'Access' (Not public *), 'Region' (US West (Oregon)), and 'Date created' (Nov 24, 2017 2:22:09 PM). A small note at the bottom left says '* Objects might still be publicly accessible due to object ACLs. Learn more'.

Bucket name	Access	Region	Date created
super-duper-mega-bucket-12345	Not public *	US West (Oregon)	Nov 24, 2017 2:22:09 PM

4 Create your own Web site



Launch Instance

A screenshot of the EC2 Dashboard. The left sidebar lists navigation items: EC2 Dashboard, Events, Tags, Reports, Limits, INSTANCES (Instances, Spot Requests, Reserved Instances), IMAGES (AMIs, Bundle Tasks), ELASTIC BLOCK STORE (Volumes, Snapshots), NETWORK & SECURITY (Security Groups, Elastic IPs, Placement Groups, Key Pairs, Network Interfaces), LOAD BALANCING (Load Balancers), and AUTO SCALING (Launch Configurations, Auto Scaling Groups). The main content area is titled 'Resources' and shows a summary of EC2 resources: 0 Running Instances, 0 Volumes, 0 Key Pairs, 0 Placement Groups, 0 Elastic IPs, 0 Snapshots, 0 Load Balancers, and 1 Security Groups. Below this is a callout box with the text: 'Easily deploy and operate applications - use Chef recipes, manage SSH users, and more. Try OpsWorks now.' A large red box highlights the 'Launch Instance' button in the 'Create Instance' section. The 'Service Health' and 'Scheduled Events' sections are also visible.

AWS Marketplace search WordPress and press Select.

The screenshot shows the AWS Marketplace search interface. The search bar at the top contains the text "WordPress". Below the search bar, there is a breadcrumb navigation path: "1. Choose AMI" → "2. Choose Instance Type" → "3. Configure Instance" → "4. Add Storage" → "5. Tag Instance" → "6. Configure Security Group" → "7. Review". On the right side of the header, there are links for "AWS User", "N. Virginia", and "Support".

Step 1: Choose an Amazon Machine Image (AMI)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. You can select an AMI provided by AWS, our user community, or the AWS Marketplace; or you can select one of your own AMIs.

The search results show three items:

- WordPress powered by Bitnami**:
 - Free tier eligible
 - 4.6★ (14) | 4.6-1-r21 on Ubuntu 14.04.3 | Sold by BitRock Inc.
 - \$0.00/hr for software + AWS usage fees
 - Linux/Unix, Ubuntu 14.04.3 | 64-bit Amazon Machine Image (AMI) | Updated: 9/6/16
 - Bitnami WordPress is a pre-configured, ready to run image for running WordPress on Amazon EC2. WordPress is one of the world's most popular web publishing platforms for ...
 - [More info](#)
 - [Select](#)
- WordPress powered by Bitnami (PV)**:
 - Free tier eligible
 - 4.6★ (70) | 4.6-1-r21 on Ubuntu 14.04.3 | Sold by BitRock Inc.
 - \$0.00/hr for software + AWS usage fees
 - Linux/Unix, Ubuntu 14.04.3 | 64-bit Amazon Machine Image (AMI) | Updated: 9/6/16
 - This image is for customers that require legacy paravirtualization support (PV). Bitnami WordPress is a pre-configured, ready to run image for running WordPress on Amazon ...
 - [More info](#)
 - [Select](#)
- WordPress Multisite powered by Bitnami**:
 - 4.6★ (5) | 4.6-1-r21 on Ubuntu 14.04.3 | Sold by BitRock Inc.
 - \$0.00/hr for software + AWS usage fees
 - Linux/Unix, Ubuntu 14.04.3 | 64-bit Amazon Machine Image (AMI) | Updated: 9/6/16
 - Bitnami Multisite is a pre-configured, ready to run image for running WordPress Multisite on Amazon ...
 - [More info](#)
 - [Select](#)

On the left sidebar, there are filters for "Categories" (All Categories, Software Infrastructure, Developer Tools, Business Software), "Operating System" (All Windows, Windows 2008, Windows 2012, Windows 2012 R2), and "All Linux/Unix". The "AWS Marketplace" filter is highlighted with a red border.

At the bottom of the page, there are links for "Feedback", "English", "Privacy Policy", and "Terms of Use".

press continue.

Instance Type	Price	Unit Price
R3 Double Extra Large	\$0.00	\$0.665
R3 Quadruple Extra Large	\$0.00	\$1.33
R3 Eight Extra Large	\$0.00	\$2.66
C4 Large	\$0.00	\$0.105
C4 Extra Large	\$0.00	\$0.209
C4 Double Extra Large	\$0.00	\$0.419
C4 Quadruple Extra Large	\$0.00	\$0.838
C4 Eight Extra Large	\$0.00	\$1.675
G2 Eight Extra Large	\$0.00	\$2.60
D2 Extra Large	\$0.00	\$0.69
D2 Double Extra Large	\$0.00	\$1.38
D2 Quadruple Extra Large	\$0.00	\$2.76
D2 Eight Extra Large	\$0.00	\$5.52
T2 Large	\$0.00	\$0.104
M4 Large	\$0.00	\$0.12
M4 Extra Large	\$0.00	\$0.239
M4 Double Extra Large	\$0.00	\$0.479
M4 Quadruple Extra Large	\$0.00	\$0.958
M4 Ten Extra Large	\$0.00	\$2.394
T2 Nano	\$0.00	\$0.007
X1 32 Extra Large	\$0.00	\$13.338

EBS General Purpose (SSD) volumes
\$0.10 per GB-month of provisioned storage

You will not be charged until you launch this instance.

[Cancel](#) [Continue](#)

Next: Configure Instance Details.

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Tag Instance 6. Configure Security Group 7. Review

Step 2: Choose an Instance Type
Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instances are virtual servers that can run applications. They have varying combinations of CPU, memory, storage, and networking capacity, and give you the flexibility to choose the appropriate mix of resources for your applications. [Learn more about instance types and how they can meet your computing needs.](#)

Filter by: All instance types ▾ Current generation ▾ Show/Hide Columns

Currently selected: t2.micro (Variable ECUs, 1 vCPUs, 2.5 GHz, Intel Xeon Family, 1 GiB memory, EBS only)

T2 instances are VPC-only. Your T2 instance will launch into your VPC. [Learn more about T2 and VPC.](#)

	Family	Type	vCPUs ⓘ	Memory (GiB) ⓘ	Instance Storage (GB) ⓘ	EBS-Optimized Available ⓘ	Network Performance ⓘ
<input type="checkbox"/>	General purpose	t2.nano	1	0.5	EBS only	-	Low to Moderate
<input checked="" type="checkbox"/>	General purpose	t2.micro	1	1	EBS only	-	Low to Moderate
<input type="checkbox"/>	General purpose	t2.small	1	2	EBS only	-	Low to Moderate
<input type="checkbox"/>	General purpose	t2.medium	2	4	EBS only	-	Low to Moderate
<input type="checkbox"/>	General purpose	t2.large	2	8	EBS only	-	Low to Moderate
<input type="checkbox"/>	General purpose	m4.large	2	8	EBS only	Yes	Moderate
<input type="checkbox"/>	General purpose	m4.xlarge	4	16	EBS only	Yes	High
<input type="checkbox"/>	General purpose	m4.2xlarge	8	32	EBS only	Yes	High
<input type="checkbox"/>	General purpose	m4.4xlarge	16	64	EBS only	Yes	High
<input type="checkbox"/>	General purpose	m4.10xlarge	40	160	EBS only	Yes	10 Gigabit
<input type="checkbox"/>	General purpose	m3.medium	1	3.75	1 x 4 (SSD)	-	Moderate

Cancel Previous **Review and Launch** Next: Configure Instance Details

Press Review and Launch

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Tag Instance 6. Configure Security Group 7. Review

Step 5: Tag Instance
A tag consists of a case-sensitive key-value pair. For example, you could define a tag with key = Name and value = Webserver. [Learn more about tagging your Amazon EC2 resources.](#)

Key (127 characters maximum) Value (255 characters maximum)

Name X

Create Tag (Up to 10 tags maximum)

Cancel Previous **Review and Launch** Next: Configure Security Group

Launch

The screenshot shows the AWS Launch wizard at Step 7: Review Instance Launch. The top navigation bar includes AWS, Services, Edit, AWS User (N. Virginia), and Support. Below the navigation, a progress bar shows steps 1 through 7, with Step 7, Review, highlighted.

Step 7: Review Instance Launch

Please review your instance launch details. You can go back to edit changes for each section. Click **Launch** to assign a key pair to your instance and complete the launch process.

AMI Details

WordPress powered by Bitnami
https://bitnami.com
Root Device Type: ebs Virtualization type: hvm
Free tier eligible

Hourly Software Fees: \$0.00 per hour on t2.micro instance
Software charges will begin once you launch this AMI and continue until you terminate the instance.

By launching this product, you will be subscribed to this software and agree that your use of this software is subject to the pricing terms and the seller's End User License Agreement.

Instance Type

Instance Type	ECUs	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance
t2.micro	Variable	1	1	EBS only	-	Low to Moderate

Cancel Previous **Launch**

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Launch Instances.

Select an existing key pair or create a new key pair

A key pair consists of a **public key** that AWS stores, and a **private key file** that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance.

Note: The selected key pair will be added to the set of keys authorized for this instance. Learn more about [removing existing key pairs from a public AMI](#).

I acknowledge that I will not be able to connect to this instance unless I already know the password built into this AMI.

Cancel **Launch Instances**

View Instances

The screenshot shows the AWS CloudWatch Metrics console. At the top, there are buttons for "Launch Instance", "Connect", and "Actions". Below that is a search bar with the placeholder "Filter by tags and attributes or search by keyword". The main area displays a table of metrics. The columns are: Name, Instance ID, Instance Type, Availability Zone, Instance State, Status Checks, Alarm Status, and Public DNS. There are two rows of data:

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS
	i-389cc29b	t2.micro	us-east-1a	terminated	None	None	
WordPress	i-98aff13b	t2.micro	us-east-1a	running	Initializing	None	ec2-54-172-168-218.c

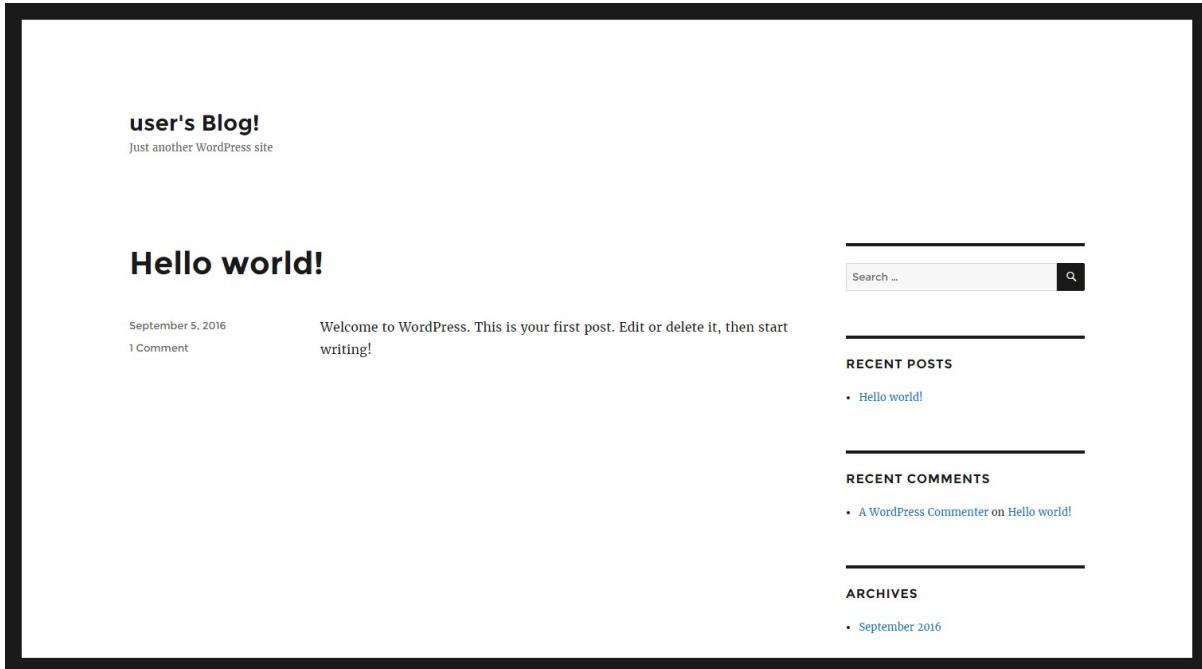
check web service

This screenshot is identical to the one above, showing the AWS CloudWatch Metrics console with the same two instances listed: one terminated and one running.

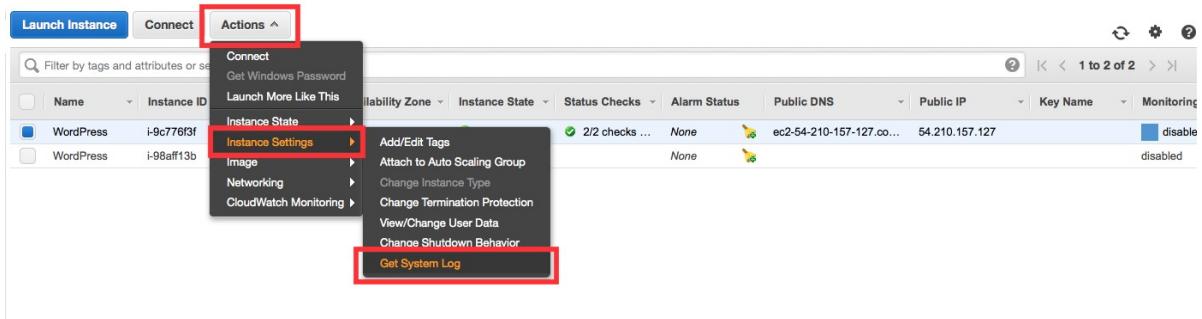
This screenshot shows the AWS EC2 instance details page for the "WordPress" instance (i-98aff13b). The instance is currently running. The details page includes tabs for Description, Status Checks, Monitoring, Tags, and Usage Instructions. The "Description" tab is active. Key details shown include:

Instance ID	i-98aff13b	Public DNS	ec2-54-172-168-218.compute-1.amazonaws.com
Instance state	running	Public IP	54.172.168.218
Instance type	t2.micro	Elastic IP	-
Private DNS	ip-172-31-59-184.ec2.internal	Availability zone	us-east-1a
Private IPs	172.31.59.184	Security groups	WordPress powered by Bitnami -HVM--4-3-0 on Ubuntu 14-04-1-AutogenByAWSMP-, view rules
Secondary private IPs		Scheduled events	No scheduled events
VPC ID	vpc-3630de52	AMI ID	bitnami-wordpress-4.3-0-linux-

show Hello World



WordPress press action



select password

System Log: i-9c776f3f (WordPress)

```
* Starting OpenSSH server[74G[ OK ]
Generating locales...
  en_US.UTF-8... up-to-date
Generation complete.
open-vm-tools: not starting as this is not a VMware VM
  * Restoring resolver state... [80G [74G[ OK ]
resize2fs 1.42.9 (4-Feb-2014)
The filesystem is already 2618595 blocks long. Nothing to do!

650000+0 records in
650000+0 records out
66560000 bytes (666 MB) copied, 59.049 s, 11.3 MB/s
Setting up swapspace version 1, size = 649996 KiB
no label, UUID=d2aa20c9-adf4-42fa-8435-e45ca7b6d0d0
micro
  * Stopping Handle applying cloud-config[74G[ OK ]
[Thu Oct  1 17:26:54 UTC 2015] Regenerating keys for wordpress
[Thu Oct  1 17:27:00 UTC 2015] Regenerating keys for wordpress finished
[Thu Oct  1 17:27:00 UTC 2015] Finished regenerating keys
#####
#                                     #
#      Setting Bitnami application password to 'r2jxNtf5bC2C' #
#                                     #
#####

151001 17:27:02 mysqld_safe Logging to '/opt/bitnami/mysql/data/mysqld.log'.
151001 17:27:02 mysqld_safe Starting mysqld.bin daemon with databases from /opt/bitnami/mysql/d
/opt/bitnami/mysql/scripts/ctl.sh : mysql started at port 3306
[Thu Oct  1 17:27:13 UTC 2015] Setting up password for mysql service
151001 17:27:20 mysqld_safe mysqld from pid file /opt/bitnami/mysql/data/mysqld.pid ended
[Thu Oct  1 17:27:33 UTC 2015] Setting up password for mysql service finished
/opt/bitnami/mysql/scripts/ctl.sh : mysql (pid 2393) already running
[Thu Oct  1 17:27:33 UTC 2015] Setting up password for wordpress application
[Thu Oct  1 17:27:39 UTC 2015] Setting up password for wordpress application finished
[Thu Oct  1 17:27:39 UTC 2015] Finished setting password
/opt/bitnami/mysql/scripts/ctl.sh : mysql (pid 2393) already running
/opt/bitnami/php/scripts/ctl.sh : php-fpm started
```

Close

connect by admin



Username

Password

Remember Me

[Lost your password?](#)

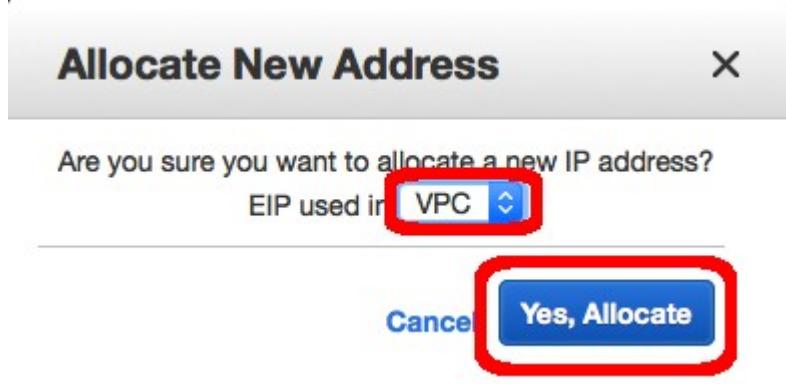
[← Back to user's Blog!](#)

5. Create a DNS

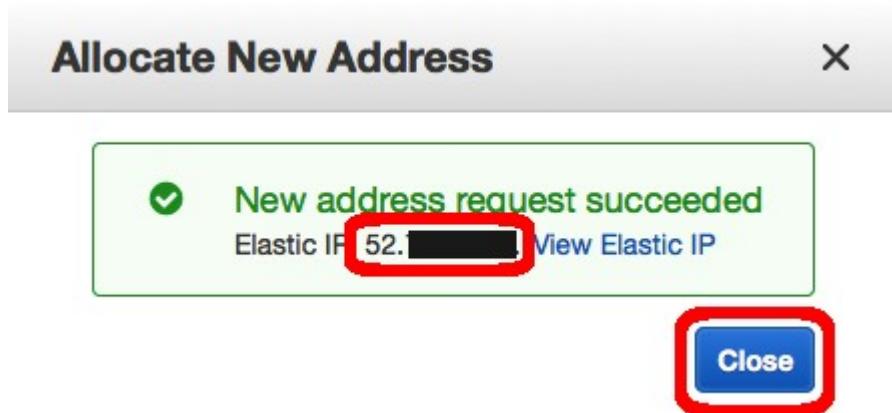
Allocate New Address

The screenshot shows the AWS EC2 Dashboard with the 'Allocate New Address' button highlighted by a red box. The dashboard includes a sidebar with various EC2 services like Instances, AMIs, and Elastic Block Store, and a main pane showing a message about no elastic IPs found.

Yes, Allocate



Input new IP address and press close



choose Associate Address

The screenshot shows the AWS EC2 Instances page. On the left, there's a sidebar with links like EC2 Dashboard, Events, Tags, Reports, Limits, Instances, Spot Requests, Reserved Instances, Commands, and Dedicated Hosts. The main area shows a table with one instance listed. The instance has a Private IP Address of 52. [REDACTED] and is associated with an Elastic IP. Above the table, there's a "Actions" dropdown menu with options: "Allocate New Address", "Release Addresses", and "Associate Address". The "Associate Address" option is highlighted with a red rectangle. The table has columns for Instance, Private IP Address, and Scope, with "vpc" selected under Scope.

Choose instance

Associate Address X

Select the instance OR network interface to which you wish to associate this IP address (52.169.111.11)

Instance

Network Interface

Private IP Address

Reassociation

Warning
If you associate an Elastic IP address with your instance, your current public IP address is released. Learn more about [public IP addresses](#).

Cancel Associate

check new IP address

The screenshot shows the AWS EC2 Dashboard. On the left, there's a sidebar with links like EC2 Dashboard, Events, Tags, Reports, Limits, Instances, Instances, and Spot Requests. The main area has tabs for 'Allocate New Address' and 'Actions'. A search bar at the top says 'Filter by attributes or search by keyword'. Below it is a table with columns: Elastic IP, Allocation ID, Instance, Private IP Address, and Scope. One row in the table is highlighted with a red box around the 'Elastic IP' column value '62. [REDACTED]'. At the bottom of the dashboard, there's a URL bar with '52 [REDACTED]' and a search bar.

Elastic IP	Allocation ID	Instance	Private IP Address	Scope
62. [REDACTED]	eipalloc-1c [REDACTED]	I- [REDACTED] (WordPress)	10.0.0.212	vpc-3; [REDACTED]

user's Blog!
Just another WordPress site

Search ...

Hello world!
Welcome to WordPress. This is your first post. Edit or delete it, then start writing!

Register Domain

AWS Services Edit Global Support

Amazon Route 53 provides users with domain management service where users can buy new domains, transfer existing domains and manage queries for the domains they own.

 DNS Management

If you already have a domain name, such as example.com, Route 53 can tell the Domain Name System (DNS) where to find web servers, mail servers, and other resources for your domain.
[Learn More](#)

 Health Check

Route 53 can monitor the health and performance of your application as well as your web servers and other resources. Route 53 can also redirect traffic to resources where your application is healthy.
[Learn More](#)

 Domain Registration

If you need a domain name, you can find an available name and buy it using Route 53. You can also make Route 53 the registrar for existing domains that you bought from other registrars.
[Learn More](#)

Get Started Now Get Started Now

Route53 Documentation

[Getting Started Guide](#) | [Route 53 Documentation](#)

Add to cart

AWS Services Edit Global Support

1: Domain Search

Choose a domain name

cloudexamples Check

2: Contact Details

3: Review & Purchase

Availability for 'cloudexamples.com'

Domain Name	Status	Price / 1 Year	Action
cloudexamples.com	✓ Available - In Cart	\$12.00	Add to cart

Availability for popular TLDs

Domain Name	Status	Price / 1 Year	Action
cloudexamples.ca	✓ Available	\$13.00	Add to cart
cloudexamples.co	✓ Available	\$25.00	Add to cart
cloudexamples.co.uk	✓ Available	\$9.00	Add to cart
cloudexamples.com.au	✓ Available	\$15.00	Add to cart
cloudexamples.de	✓ Available	\$9.00	Add to cart
cloudexamples.eu	✓ Available	\$13.00	Add to cart

Shopping Cart

One time fees

cloudexamples.com	1 Year Registration	\$12.00
-------------------	---------------------	---------

SUBTOTAL \$12.00

Monthly Fees for DNS Management

[View pricing details](#) for Route 53 queries and for the hosted zone that we create for each new domain.

Continue

AWS Services Edit Global Support

1: Domain Search
2: Contact Details
3: Review & Purchase

Contact Details for Your 1 Domain

Enter the details for your Registrant, Administrative and Technical contacts below. All fields are required unless specified otherwise. [Learn more.](#)

My Registrant, Administrative and Technical Contacts are all the same: Yes No

Registrant Contact

Contact Type: Person
First Name: Adam
Last Name: Glick
Organization: Not applicable
Email: [REDACTED]
Phone: + 1 . [REDACTED]
Address 1: [REDACTED]
Address 2: Optional
Country: United States

Shopping Cart

One time fees

cloudexamples.com
1 Year Registration \$12.00

SUBTOTAL \$12.00

Monthly Fees for DNS Management

[View pricing details](#) for Route 53 queries and for the hosted zone that we create for each new domain.

Complete Purchase

AWS Services Edit Global Support

1: Domain Search
2: Contact Details
3: Review & Purchase

Review details and complete your purchase

When you complete your purchase, we'll assign the following contacts to all of the domains in your shopping cart.

Registrant Contact	Administrative Contact	Technical Contact
Adam Glick +1 [REDACTED] Seattle WA US Privacy protected	Adam Glick +1 [REDACTED] Seattle WA US Privacy protected	Adam Glick +1 [REDACTED] Seattle WA US Privacy protected

Managing DNS for Your New Domain

To make it easier for you to use Route 53 as the DNS service for your new domain, we'll automatically create a hosted zone. That's where you store information about how to route traffic for your domain, for example, to an Amazon EC2 instance. If you won't use your domain right now, you can delete the hosted zone. If you will use your domain, Route 53 charges for the hosted zone and for the DNS queries that we receive for your domain. For more information, see [Amazon Route 53 Pricing](#).

Terms and Conditions

Amazon Route 53 enables you to register and transfer domain names using your AWS account. However, AWS is not a domain name registrar, so we use registrar associates to perform registration and transfer services. When you purchase domain names through AWS, you are registering your domain with one of our registrar associates. The registrar for your domain will periodically contact the registrant contact that you specified to verify the contact details and renew registration.

I have read and agree to the [AWS Domain Name Registration Agreement](#)

Cancel Back **Complete Purchase**

Configure DNS

Hosted Zones

The screenshot shows the AWS Route 53 service interface under the 'Services' menu. On the left, there's a navigation pane with options like Dashboard, Hosted zones (which is selected and highlighted in orange), Health checks, Traffic flow, Traffic policies, Policy records, Domains, Registered domains, and Pending requests. The main content area is titled 'Create Hosted Zone' and shows a table with one row for 'cloudexamples.com.'. The row includes columns for Domain Name (with a red box around it), Type (Public), Record Set Count (8), and Comment (HostedZone created by Route53 Registrar). A 'Hosted Zone ID' column also contains a redacted value.

Create Record Set

The screenshot shows the 'Create Record Set' page within the AWS Route 53 service. The left sidebar has the same navigation as the previous screen. The main area has a 'Create Record Set' button at the top, which is highlighted with a red box. Below it, there's a table showing existing record sets for the domain. On the right, there's a 'Create Record Set' form. The 'Name' field is set to 'www.cloudeaux.com.' (with a red box around 'www'). The 'Type' is set to 'A - IPv4 address'. Under 'Value', there's a text input field containing '52' (with a red box around it). The 'TTL (Seconds)' dropdown is set to '300'. At the bottom right of the form is a large blue 'Create' button, which is also highlighted with a red box.

The screenshot shows the AWS Route 53 service dashboard. On the left, there's a sidebar with options like Dashboard, Hosted zones, Health checks, Traffic flow, Traffic policies, Policy records, Domains, Registered domains, and Pending requests. The 'Hosted zones' option is selected. In the main area, there's a search bar for 'Record Set Name' and buttons for 'Back to Hosted Zones', 'Create Record Set', 'Import Zone File', and 'Delete Record Set'. A table lists three record sets:

Name	Type	Value
cloudexamples.com.	NS	ns-1072.awsdns-06.org. ns-387.awsdns-48.com. ns-744.awsdns-29.net. ns-1909.awsdns-46.co.uk.
cloudexamples.com.	SOA	ns-1072.awsdns-06.org. awsdns-hostmaster.amazon.com.
www.cloudexamples.com.	A	52. [REDACTED]

To the right, there's a 'Create Record Set' form with fields for Name (cloudeexamples.com), Type (A - IPv4 address), Alias (Yes), Alias Target (Enter target name), Routing Policy (Simple), and Evaluate Target Health (Yes). Below the table, a URL bar shows 'www.cloudexamples.com' with a red box around it, and a search bar at the bottom.

user's Blog!

Just another WordPress site

Search ...

RECENT POSTS

Hello world!

Welcome to WordPress. This is your first post. Edit or delete it, then start writing!

6.1. Create User AWS IAM

Open services Identity and Access Management.

The screenshot shows the AWS Home Page. At the top, there is a search bar with 'iam' typed into it. Below the search bar, the 'AWS services' section has a red box around the 'IAM' item, which is described as 'Manage User Access and Encryption Keys'. Other visible services include Simple Queue Service, Simple Notification Service, Route 53, EC2, and EFS. To the right, there is a 'Helpful tips' section with links to 'Manage your costs' and 'Create an organization', and an 'Explore AWS' section with links to various AWS services like RDS, Kinesis, and ECS.

Users

The screenshot shows the AWS IAM Dashboard. On the left, a sidebar menu has 'Users' selected, indicated by a red box. The main content area displays a 'Welcome to Identity and Access Management' message with a sign-in link. It also shows 'IAM Resources' with counts for Users (0), Groups (0), Roles (4), and Identity Providers (0). A 'Security Status' section lists several items with icons: 'Activate MFA on your root account' (orange triangle), 'Create individual IAM users' (orange triangle), 'Use groups to assign permissions' (orange triangle), and 'Apply an IAM password policy' (green square). To the right, there is a 'Feature Spotlight' video player titled 'Introduction to AWS IAM' and an 'Additional Information' section with links to IAM best practices, documentation, and other resources.

Add user.

The screenshot shows the AWS IAM service interface. The left sidebar has 'Users' selected. The main area has a search bar and a table with columns: User name, Groups, Access key age, Password age, Last activity, and MFA. A message at the bottom says 'There are no IAM users. Learn more'. The 'Add user' button is highlighted with a red box.

Next: Permissions

The screenshot shows the 'Add user' wizard. Step 1: Set user details. It shows a 'User name*' field with 'AWS_Admin' entered, which is highlighted with a red box. Below it is a link to 'Add another user'. The wizard has four steps: Details (1), Permissions (2), Review (3), and Complete (4). Step 1 is highlighted with a blue circle.

Set user details
You can add multiple users at once with the same access type and permissions. [Learn more](#)

User name* [Add another user](#)

Select AWS access type
Select how these users will access AWS. Access keys and autogenerated passwords are provided in the last step. [Learn more](#)

Access type* **Programmatic access**
Enables an **access key ID** and **secret access key** for the AWS API, CLI, SDK, and other development tools.

AWS Management Console access
Enables a **password** that allows users to sign-in to the AWS Management Console.

* Required [Cancel](#) [Next: Permissions](#)

choose AdministratorAccess

Add user

Set permissions for AWS_Admin

1 Details 2 Permissions 3 Review 4 Complete

Attach one or more existing policies directly to the users or create a new policy. [Learn more](#)

Create policy Refresh

Filter: Policy type ▾ Search Showing 282 results

	Policy name	Type	Attachments	Description
<input checked="" type="checkbox"/>	AdministratorAccess	Job function	0	Provides full access to AWS services and resources.
<input type="checkbox"/>	AmazonAPIGatewayAdministrator	AWS managed	0	Provides full access to create/edit/delete APIs in Amazon API Gateway via the AWS Management Console.
<input type="checkbox"/>	AmazonAPIGatewayInvokeFullAccess	AWS managed	0	Provides full access to invoke APIs in Amazon API Gateway.
<input type="checkbox"/>	AmazonAPIGatewayPushToCloudWatchLogs	AWS managed	0	Allows API Gateway to push logs to user's account.
<input type="checkbox"/>	AmazonAppStreamFullAccess	AWS managed	0	Provides full access to Amazon AppStream via the AWS Management Console.
<input type="checkbox"/>	AmazonAppStreamReadOnlyAccess	AWS managed	0	Provides read only access to Amazon AppStream via the AWS Management Console.
<input type="checkbox"/>	AmazonAppStreamServiceAccess	AWS managed	0	Default policy for Amazon AppStream service role.
<input type="checkbox"/>	AmazonAthenaFullAccess	AWS managed	0	Provide full access to Amazon Athena and scoped access to the dependencies needed to enable it.
<input type="checkbox"/>	AmazonChimeFullAccess	AWS managed	0	Provides full access to Amazon Chime Admin Console via the AWS Management Console.
<input type="checkbox"/>	AmazonChimeReadOnly	AWS managed	0	Provides read only access to Amazon Chime Admin Console via the AWS Management Console.

Cancel Previous Next: Review

Create user.

Add user

1 Details 2 Permissions 3 Review 4 Complete

Review

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

User details

User name	AWS_Admin
AWS access type	Programmatic access - with an access key

Permissions summary

The following policies will be attached to the user shown above.

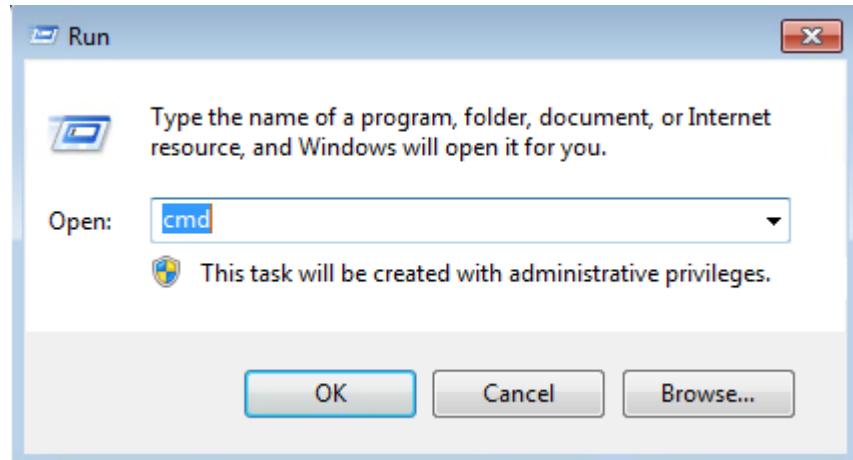
Type	Name
Managed policy	AdministratorAccess

Cancel Previous Create user

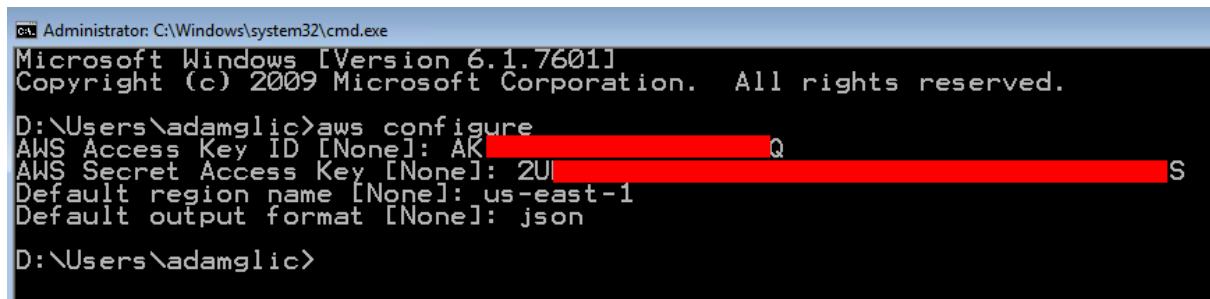
Download Credentials

The screenshot shows the AWS Management Console with the navigation bar at the top. Below it, a progress bar indicates four steps: 'Details' (step 1), 'Permissions' (step 2), 'Review' (step 3), and 'Complete' (step 4). The 'Complete' step is highlighted with a blue circle and a large number '4'. The main content area displays a 'Success' message: 'You successfully created the users shown below. You can view and download user security credentials. You can also email users instructions for signing in to the AWS Management Console. This is the last time these credentials will be available to download. However, you can create new credentials at any time.' It also includes a link to the AWS Management Console sign-in page: <https://518299837528.signin.aws.amazon.com/console>. A red box highlights the 'Download .csv' button. Below this is a table showing the newly created user 'AWS_Admin' with columns for User, Access key ID, and Secret access key. The Access key ID is shown as AKIAITODEW5FBCY72FIQ and the Secret access key is shown as a series of asterisks followed by a 'Show' link. A red box highlights the 'Close' button.

6.2 Configure CLI AWS



aws configure



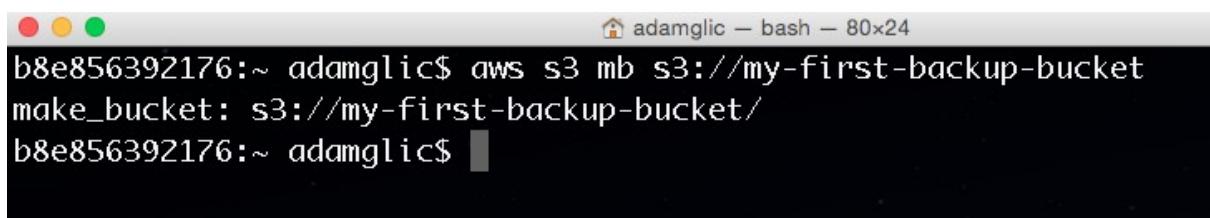
```
D:\Administrator:C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

D:\Users\adamglic>aws configure
AWS Access Key ID [None]: AK [REDACTED] Q
AWS Secret Access Key [None]: 2U [REDACTED] S
Default region name [None]: us-east-1
Default output format [None]: json

D:\Users\adamglic>
```

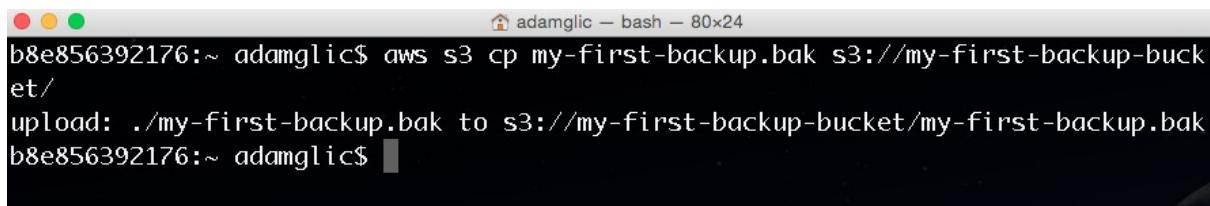
6.3 Use CLI AWS c Amazon S3

```
aws s3 mb s3://my-first-backup-bucket
```



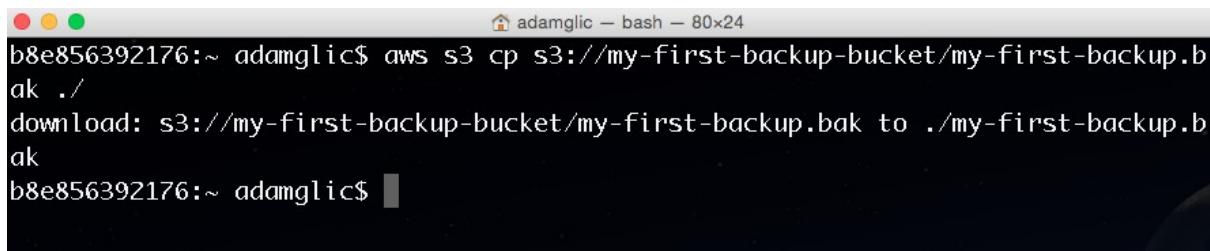
```
b8e856392176:~ adamglic$ aws s3 mb s3://my-first-backup-bucket
make_bucket: s3://my-first-backup-bucket/
b8e856392176:~ adamglic$
```

```
aws s3 cp "C:\users\my first backup.bak" s3://my-first-backup-bucket/
```



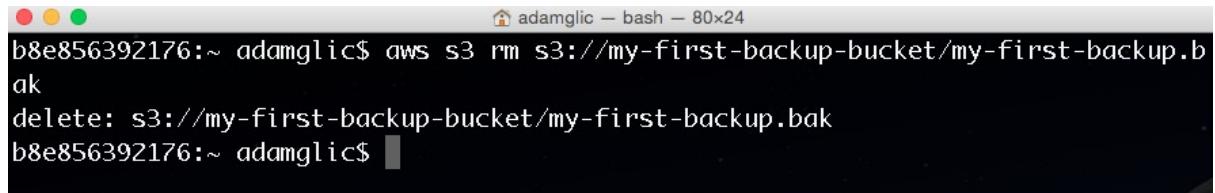
```
b8e856392176:~ adamglic$ aws s3 cp my-first-backup.bak s3://my-first-backup-bucket/
upload: ./my-first-backup.bak to s3://my-first-backup-bucket/my-first-backup.bak
b8e856392176:~ adamglic$
```

```
aws s3 cp s3://my-first-backup-bucket/my-first-backup.bak ./
```



```
b8e856392176:~ adamglic$ aws s3 cp s3://my-first-backup-bucket/my-first-backup.bak ./
download: s3://my-first-backup-bucket/my-first-backup.bak to ./my-first-backup.bak
b8e856392176:~ adamglic$
```

```
aws s3 rm s3://my-first-backup-bucket/my-first-backup.bak
```



```
adamglic ~ bash 80x24
b8e856392176:~ adamglic$ aws s3 rm s3://my-first-backup-bucket/my-first-backup.bak
delete: s3://my-first-backup-bucket/my-first-backup.bak
b8e856392176:~ adamglic$
```

7. Web site

