THE PERFECT PAIR

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In this project we created a load-balanced WordPress website that sells socks. Our website uses different cloud services such as an Amazon S3 bucket and a MySQL database.

In Amazon lightsail we created a Wordpress instance and a MySQL managed database.The MySQL managed database will serve as the central database for all of the WordPress instances that will be load balanced.

WordPress-1

512 MB RAM, 1 vCPU, 20 GB SSD
WordPress
Ohio, Zone A (us-east-2a)

Stop   Reboot

Status: **Running**

Static IP: **3.21.254.240** 📌
Private IP: **172.26.1.158**
Public IPv6: **2600:1f16:a68:8600:9053:664f:d23a:e071**

Learn more about IPv6 🗗

Database-1

1 GB RAM, 1 vCPU, 40 GB SSD
MySQL database (8.0.28)
Ohio, Zone A (us-east-2a)

Stop   Reboot

Status: **Available**

Endpoint: **ls-8c07d07bc7754177ee62a86b6110be422b68c863.ci6s82jpac8c.us-east-2.rds.amazonaws.com**
Port: **3306**

Created an Amazon S3 bucket to store the media from our website

```json
JSON

{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Sid": "VisualEditor0",
            "Effect": "Allow",
            "Action": [
                "s3:PutObject",
                "s3:GetObjectAcl",
                "s3:GetObject",
                "s3:PutBucketAcl",
                "s3:ListBucket",
                "s3:DeleteObject",
                "s3:GetBucketAcl",
                "s3:GetBucketLocation",
                "s3:PutObjectAcl"
            ],
            "Resource": [
                "arn:aws:s3:::<your bucket name>",
                "arn:aws:s3:::<your bucket name>/*"
            ]
        }
    ]
}
```
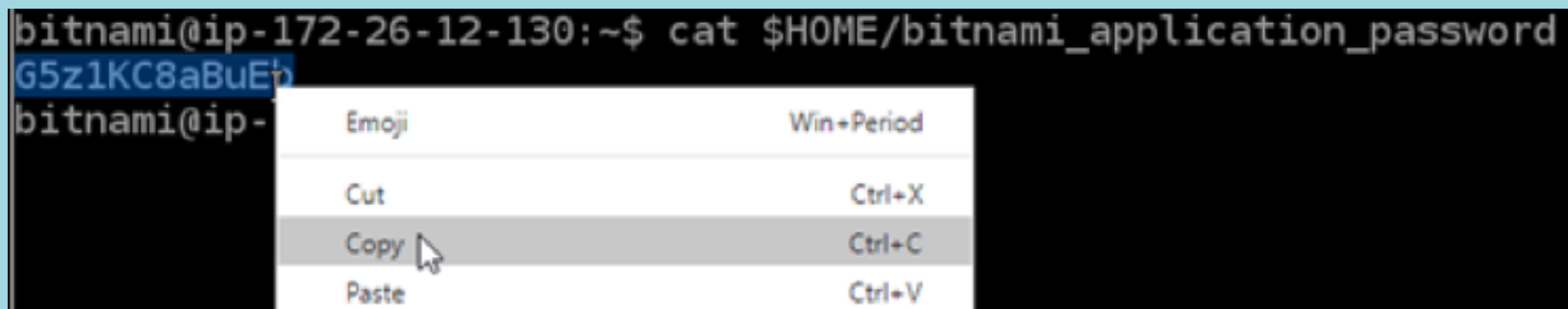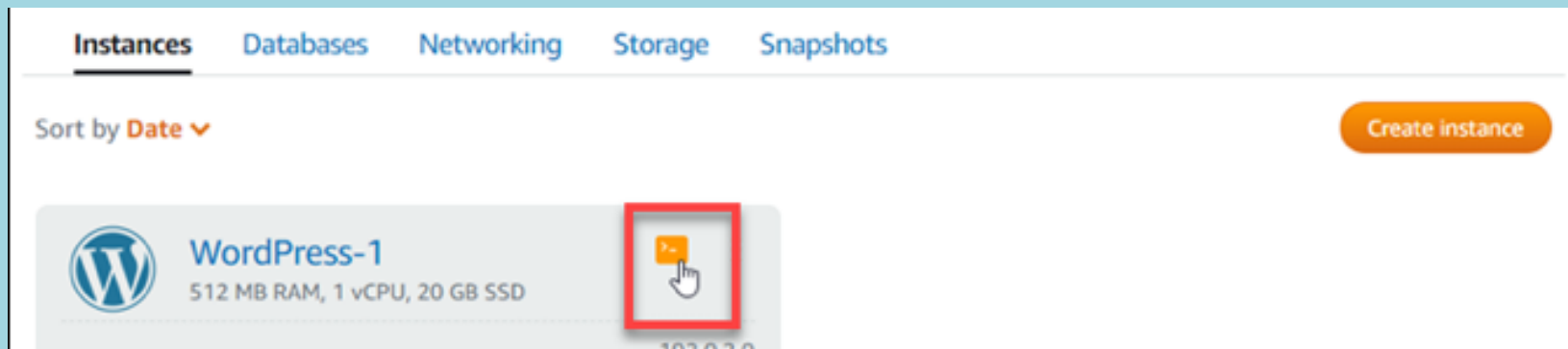
We created an IAM user and a policy to give the user access to the S3 bucket.

Configured our WordPress instance to connect to the MySQL database and configured the IAM user credentials via the browser-based SSH client window

Installed the WP Offload Media Lite plugin to connect to the S3 bucket. Our website can upload media files to the Amazon S3 bucket. The S3 bucket serves as the central media files location for all of the WordPress instances that are load balanced.

Offload Media Lite

STORAGE PROVIDER

○ **Amazon S3**

○ **Define access keys in wp-config.php**

● **My server is on Amazon Web Services and I'd like**

If you host your WordPress site on Amazon Web Ser Roles. More info »

○ **I understand the risks but I'd like to store access** recommended)

Amazon S3 > Buckets > cloud-computing-project-bucket-1 > wp-content/

uploads/

Objects | **Properties**

Objects (1)

Objects are the fundamental entities stored in Amazon S3. You can use **Amazon S3 inventory** them permissions. **Learn more** [↗]

[↻] | [⧉ Copy S3 URI] | [⧉ Copy URL] | [↓ Download]

[🔍 Find objects by prefix]

	Name ▲	Type ▽	Last modified
☐	📄 socks.jpg	jpg	April 19, 2022, 17:2:

Took a snapshot and then used the snapshot to duplicate our WordPress Instance

Created a LoadBalancer in Lightsail and attached our WordPress Instances

LOAD BALANCERS

LoadBalancer-1
Load balancer, 2 instances

All instances balanced   Ohio, all zones

Connected to the MySQL database using Sqlectron.

Server Information

Name

Cloud Computing

Database Type

MySQL

SSL

Server Address

ls-8c07d07bc7754177ee62a86b6 | 3306 | Domain | Unix socket path

User

dbmasteruser

Password

••••••••••••

Initial Database/Keyspace

Database

Initial Schema

Schema

URI

mysql://dbmasteruser:***********@ls-8c07d07bc7754177ee62a86b6110be422b68c863.ci6s82jpac8c.us-east-2.rds.amazonaw

Make the password visible in order to change the database credentials through the URI format.
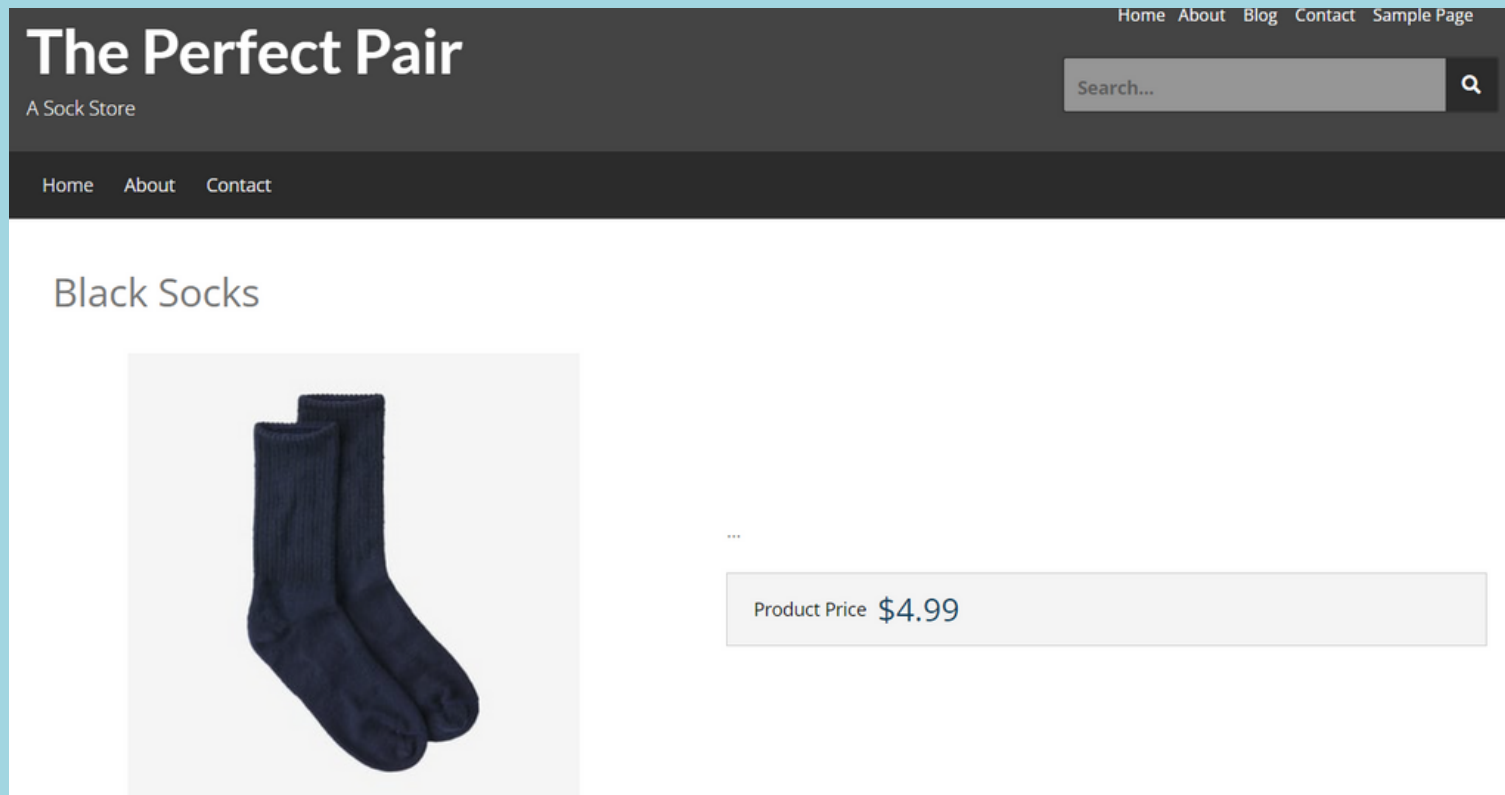
SSH Tunnel

Filter

Test | Duplicate | Cancel | Save | Remove

We customized our website and were able to view and edit the information from our website in our MySQL database.

THANKS FOR YOUR TIME!