AWS php Server + github repo clone + UserData configuration + map to squarespace domain

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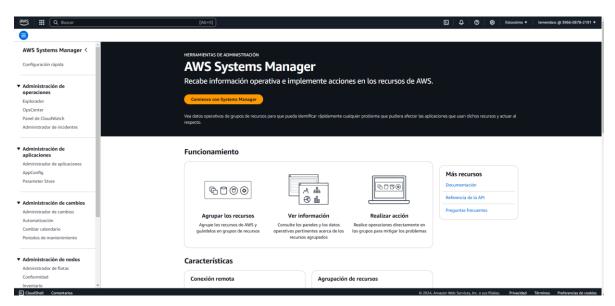
Create the GitHub Repository for the PHP Dummy Page

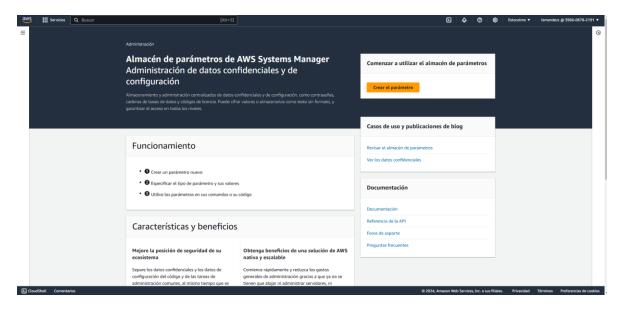
2. Create a Personal Access Token (PAT) for GitHub

Create Your GitHub Personal Access Token

- 1. Log in to your GitHub account.
- 2. Go to Settings > Developer settings > Personal access tokens.
- 3. Generate a **new token** with appropriate access scopes (e.g., repository read access).
- 4. Copy the token and store it securely, as you will only see it once.

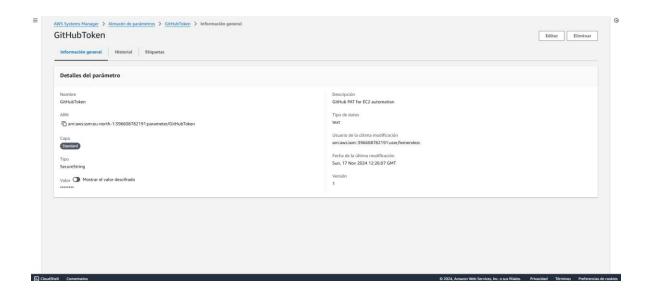
3. Create an AWS SSM Parameter for the Token





Step 2: Store the Token in AWS Systems Manager Parameter Store

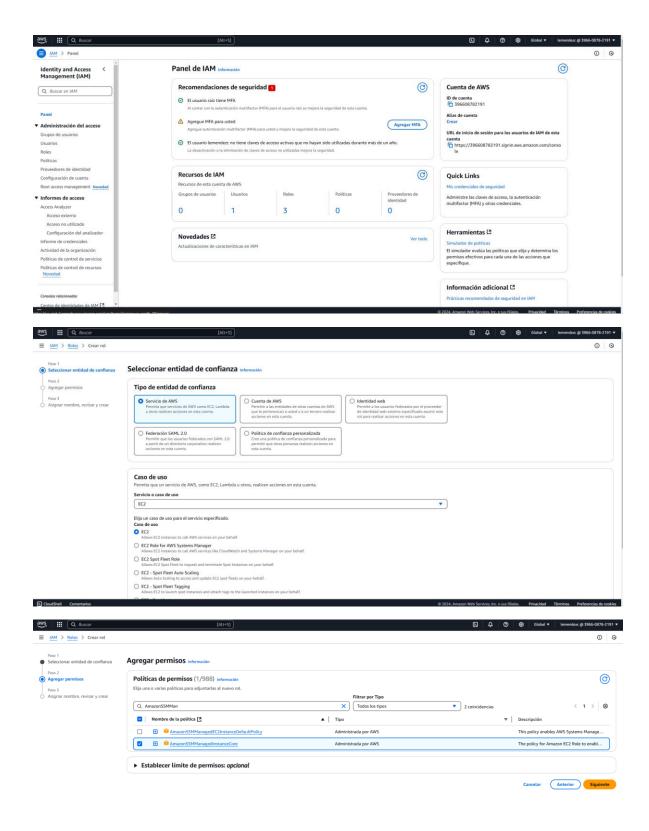
- 1. Log in to your AWS Management Console.
- 2. Navigate to AWS Systems Manager.
- 3. In the left-hand menu, click on **Parameter Store**.
- 4. Click Create parameter.
 - o **Name:** Enter a name for the parameter (e.g., /GitHubToken).
 - Description: (Optional) Add a description (e.g., "GitHub PAT for EC2 automation").
 - Type: Select SecureString.
 - o **KMS Key Source:** Use the default AWS-managed key for encryption.
 - Value: Paste your GitHub token.
- 5. Click Create parameter.



4. Create an AWS IAM Role for EC2 Access

Create the IAM Role for SSM Access (if not done already)

- Go to AWS IAM Console.
- Click Roles > Create Role.
- Choose AWS Service > EC2.
- Attach the AmazonSSMManagedInstanceCore policy.
- Name the role (e.g., EC2SSMAccessRole) and create it.
- Attach this role to your EC2 instance by selecting the instance > Actions >
 Security > Modify IAM Role > select EC2SSMAccessRole.



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					0	0
Paso 1 Seleccionar entidad de confianza	Asignar nombre, revisar y crear					
Paso 2 Agregar permisos	Detalles del rol					
Paul 3 Adignar nombre, revisar y crear	Nombre del rol. Ingrese un nombre significativo para identificar a este rol.					
	EC2SSMAccessRole					
	64 Caracteres miximos. Utilice caracteres al fanuméricos y '1 * -, @'. Descripción Agregac una breve esplicación para este rel.					
	Allows EC2 instances to call AWS services on your behalf.					
	Makimo de 1000 caracteres. Utilice letras (A-Z y a-z), números (3-9), tabulaciones, nuevas lineas o cualquiera de los siguientes caracteres: _+**, @-\\[0]=9\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\					
	Paso 1: seleccionar entidades de confianza				Editar	
	Política de confianza					
	1 ("version": "2012-10-17", 3 - "Statement": { "effect": "Allow", "					
▶ CloudShell Comentarios	© 2024, A	nazon Web Services,	Inc. o sus fi	liales. Privacidad	Términos Preferencias de coo	kies

5. Launch an EC2 Instance

#!/bin/bash

Update package list and install required packages
sudo apt-get update
sudo apt-get install -y apache2 php libapache2-mod-php git unzip curl jq

Install AWS CLI using the official method to ensure compatibility

curl "https://awscli.amazonaws.com/awscli-exe-linux-x86_64.zip" -o "awscliv2.zip"

unzip awscliv2.zip

sudo ./aws/install

Retrieve GitHub token from AWS Systems Manager Parameter Store

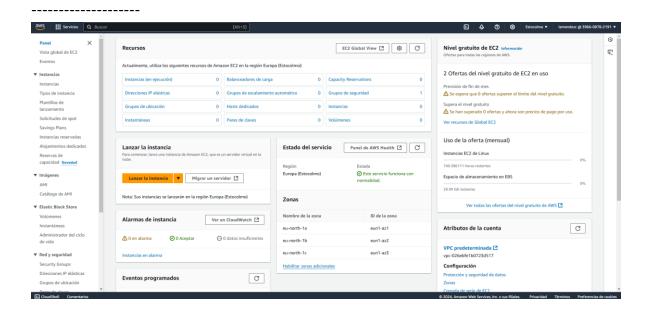
GITHUB_TOKEN=\$(aws ssm get-parameter --name "GitHubToken" --with-decryption -query "Parameter.Value" --output text)

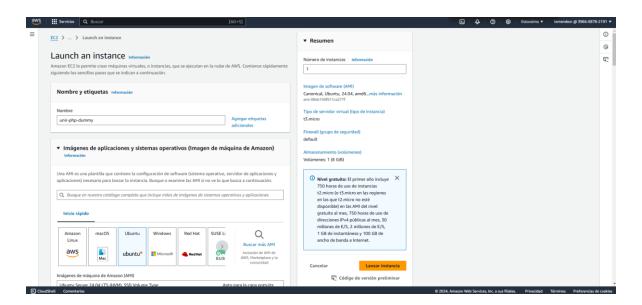
```
# Check if the token retrieval was successful
if [ -z "$GITHUB_TOKEN" ]; then
  echo "Failed to retrieve GitHub token from AWS SSM. Exiting."
 exit 1
fi
# Create the web root directory if it doesn't exist
sudo mkdir -p /var/www/html
# Navigate to the web root
cd /var/www/html || exit 1
# Remove index.html if it exists
if [ -f "index.html" ]; then
  sudo rm -f index.html
fi
# Clone the GitHub repository using the token retrieved from AWS SSM
sudo git clone https://$GITHUB_TOKEN@github.com/luismendezc/phpDummy.git || {
  echo "GitHub clone failed. Exiting."
  exit 1
}
# Check if the repository was cloned successfully
if [!-d "phpDummy"]; then
 echo "Failed to clone repository. Exiting."
```

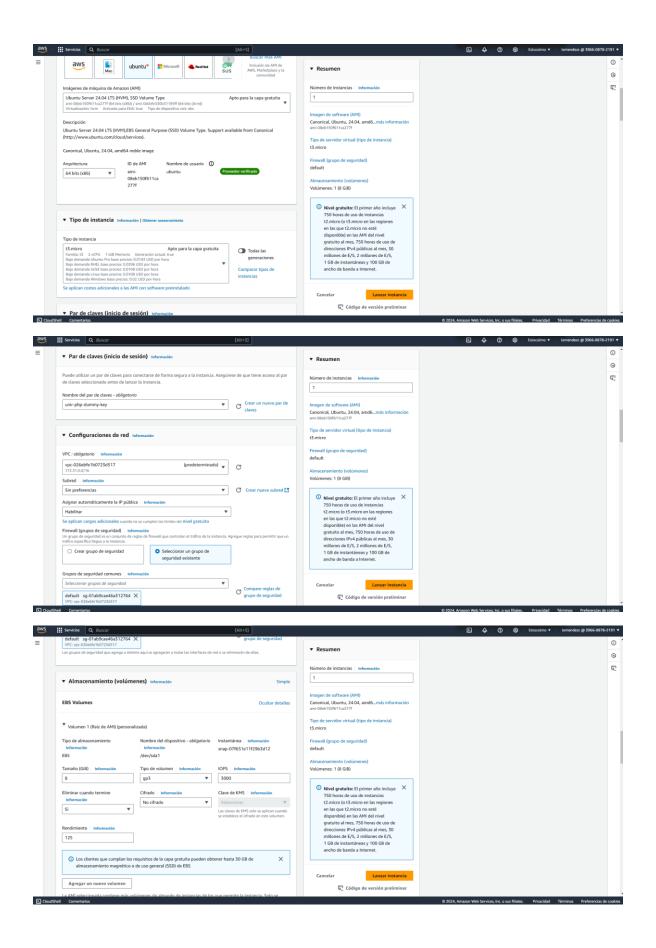
```
exit 1
fi
# Move files to the web root and handle any conflicts
sudo mv phpDummy/public/* /var/www/html/ || {
 echo "Moving files failed. Exiting."
 exit 1
}
sudo cp -r phpDummy/assets /var/www/html/ || {
 echo "Copying assets failed. Exiting."
 exit 1
}
sudo cp -r phpDummy/templates /var/www/html/ || {
  echo "Copying templates failed. Exiting."
  exit 1
}
# Set the correct permissions
sudo chown -R www-data:www-data/var/www/html/
sudo chmod -R 755 /var/www/html/
# Restart Apache to apply changes
sudo systemctl restart apache2
# Clean up installation files
rm -f awscliv2.zip
```

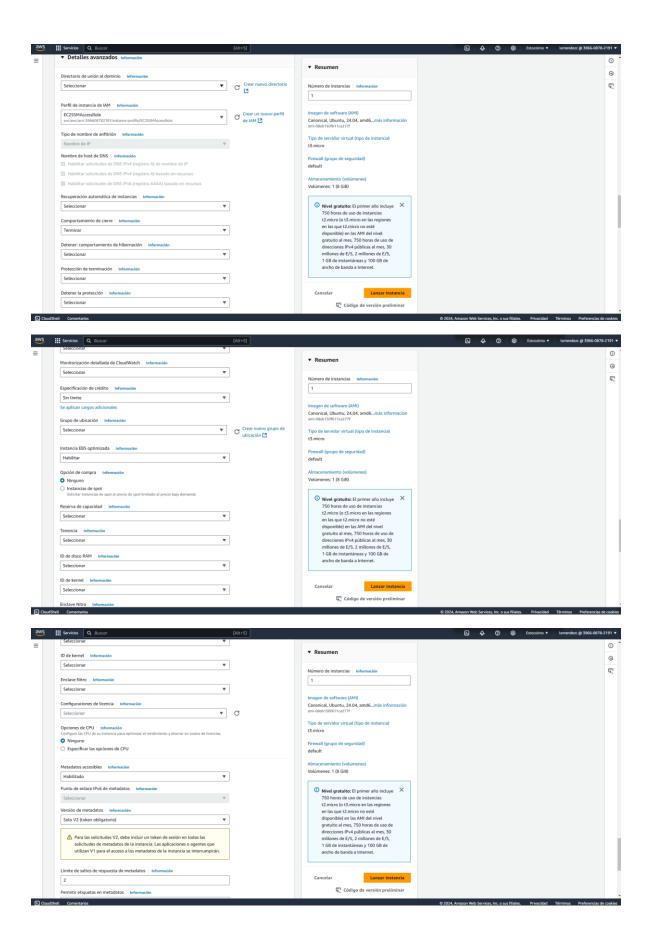
rm -rf aws

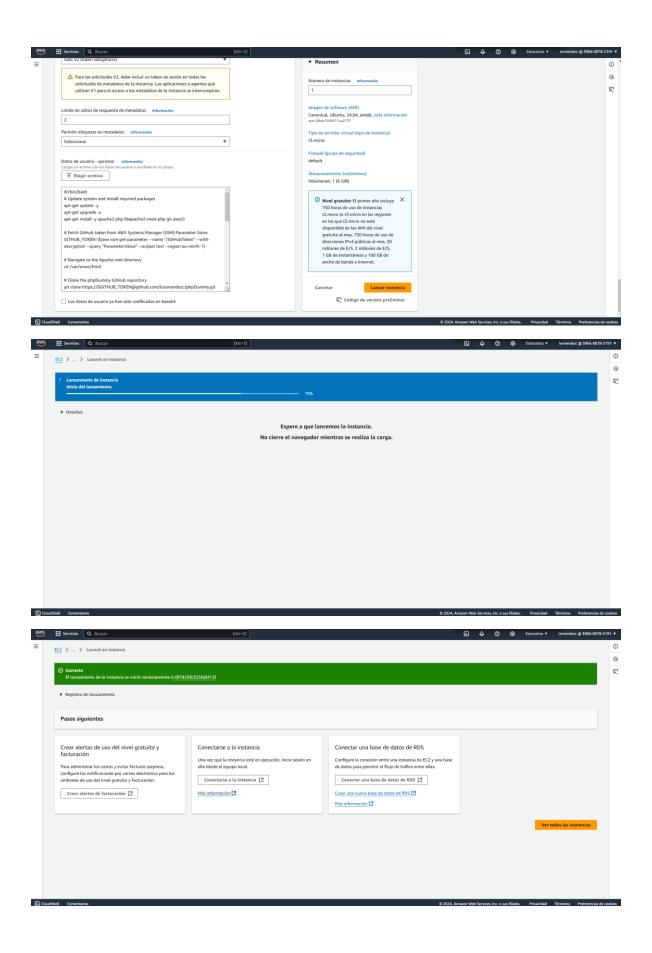
echo "Setup complete."

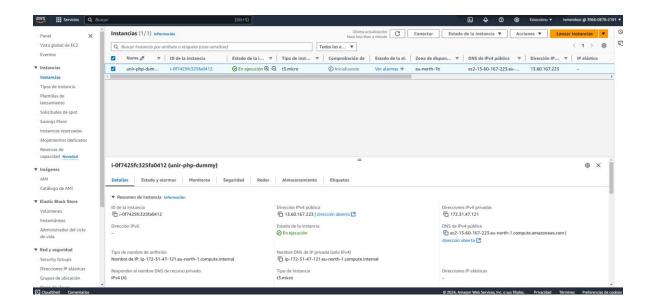




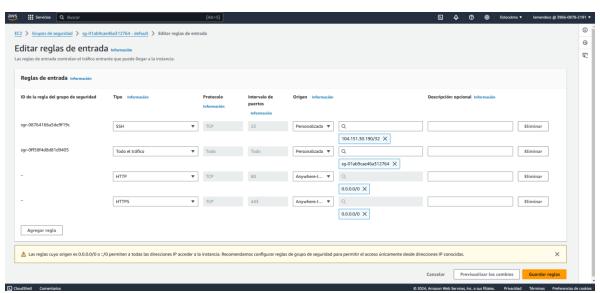




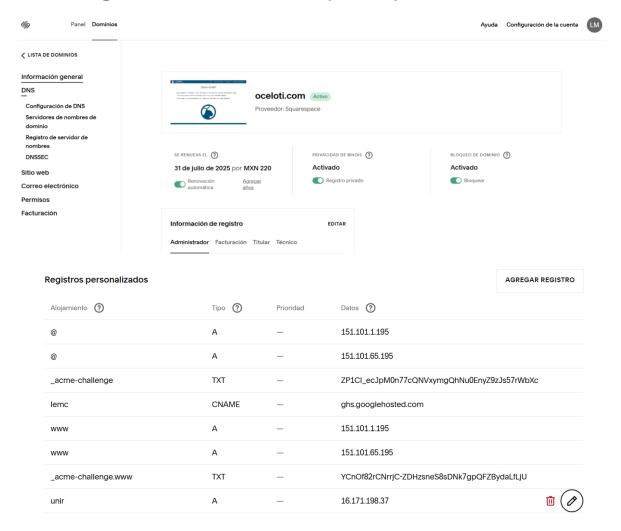




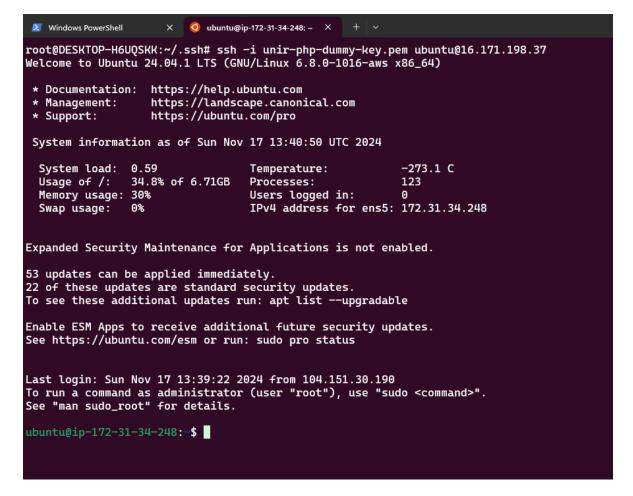
6. Configure Security Group Network Rules



7. Configure Subdomain in Squarespace



8. Connect to the EC2 Instance Using SSH



sudo cat /var/log/cloud-init-output.log

inflating: aws/dist/docutils/parsers/rst/include/mmlextra-wide.txt
inflating: aws/dist/docutils/parsers/rst/include/isoamsr.txt
You can now run: /usr/local/bin/aws --version
Cloning into 'phpDummy'...
Setup complete.
Cloud-init v. 24.3.1-0ubuntu0~24.04.1 finished at Sun, 17 Nov 2024 13:40:24 +0000. Datasource DataSourceEc2Local. Up 75.90 seconds
ubuntu0ip-172-31-34-248: \$ sudo cat /var/log/cloud-init-output.log

9. Install Let's Encrypt SSL Certificate

```
Windows PowerShell
                                          × 🧔 ubuntu@ip-172-31-34-248: ~ × + ~
 ubuntu@ip-172-31-34-248:~$ sudo apt-get update
Hit:1 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble InRelease
Hit:2 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease
Hit:3 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu noble-security InRelease
Reading package lists... Done
ubuntu@ip-172-31-34-248:-$ sudo apt-get install -y certbot python3-certbot-apache
Reading package lists... Done
Building dependency tree... Done
 Reading state information... Done
The following additional packages will be installed:
    augeas-lenses libaugeas0 python3-acme python3-augeas python3-certbot python3-configargparse python3-icu python3-josepy python3-parsedatetime python3-rfc3339
 Suggested packages:
    augeas-doc python-certbot-doc python3-certbot-nginx augeas-tools python-acme-doc
    python-certbot-apache-doc
 The following NEW packages will be installed:
The following NEW packages will be installed:
    augeas-lenses certbot libaugeas0 python3-acme python3-augeas python3-certbot python3-certbot-apache
    python3-configargparse python3-icu python3-josepy python3-parsedatetime python3-rfc3339
0 upgraded, 12 newly installed, 0 to remove and 41 not upgraded.
Need to get 1657 kB of archives.
After this operation, 8599 kB of additional disk space will be used.
Get:1 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 augeas-lenses all 1.14.1-1build2 [3
23 kB]
Get:2 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 libaugeas0 amd64 1.14.1-1build2 [16
6 kB]
Get:3 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 python3-josepy all 1.14.0-1 [22.1 k
в]
Get:4 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 python3-rfc3339 all 1.1-4 [6744 B]
Get:5 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 python3-acme all 2.9.0-1 [48.5 kB]
Get:6 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 python3-augeas all 0.5.0-1.1 [9124
B]
Get:7 http://eu-north-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 python3-configargparse all
```

10. Configure Redirection from HTTP to HTTPS

sudo nano /etc/apache2/sites-available/000-default.conf

<VirtualHost *:80>

ServerName unir.oceloti.com

Redirect permanent / https://unir.oceloti.com/

</VirtualHost>

```
× 🧑 ubuntu@ip-172-31-34-248: /v × + ×
  GNU nano 7.2
                                            /etc/apache2/sites-available/000-default-le-ssl.conf
<VirtualHost *:80>
           ServerName unir.oceloti.com
           Redirect permanent / https://unir.oceloti.com/
</VirtualHost>
<IfModule mod_ssl.c>
<VirtualHost *:443>
          # The ServerName directive sets the request scheme, hostname and port that
# the server uses to identify itself. This is used when creating
# redirection URLs. In the context of virtual hosts, the ServerName
# specifies what hostname must appear in the request's Host: header to
           # match this virtual host. For the default virtual host (this file) this # value is not decisive as it is used as a last resort host regardless.
           #ServerName www.example.com
           ServerAdmin webmaster@localhost
           DocumentRoot /var/www/html
           # error, crit, alert, emerg.
# It is also possible to configure the loglevel for particular
          # modules, e.g.
#LogLevel info ssl:warn
          ErrorLog ${APACHE_LOG_DIR}/error.log
CustomLog ${APACHE_LOG_DIR}/access.log combined
           # For most configuration files from conf-available/, which are
                                                                  [ Read 41 lines ]
                     Execute
                                                                                                            ^C Location
                                                                                        Justify
                                                                                                             ^/ Go To Line
```

Final Steps and Verification

