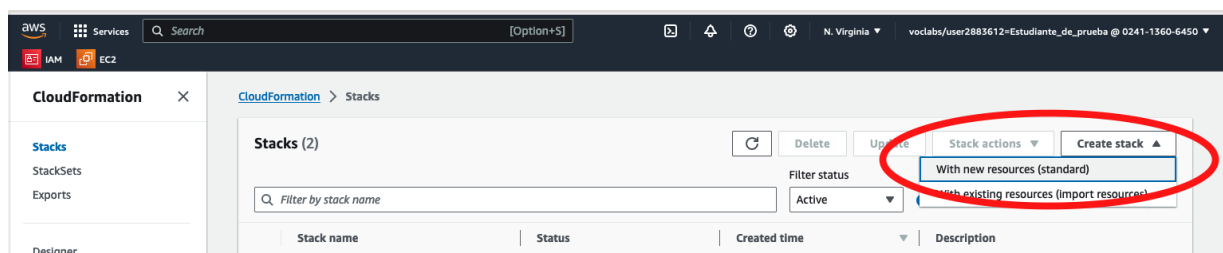


# Introduction to CloudFormation

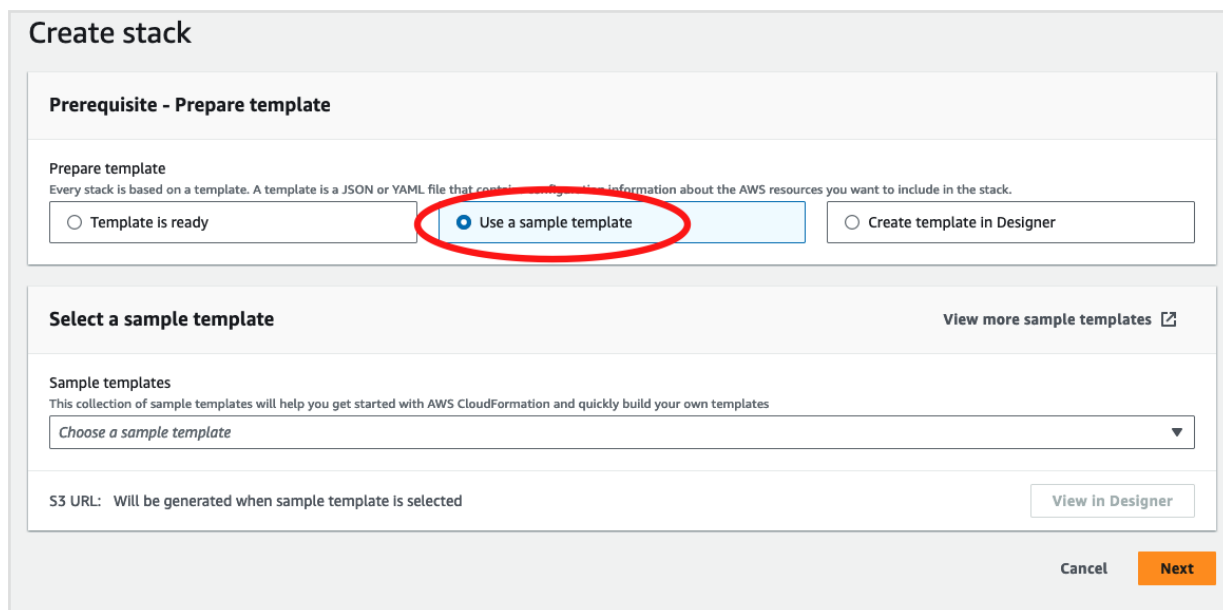
By Luis Daniel Benavides Navarro

Version: 3-10-2023

1. Create a new stack with new resources.



2. Select the option of "Use a sample template" and choose the simple Lamp Template.



Create stack

Q

Simple

**LAMP Stack**  
Create a LAMP Stack using a single EC2 instance and a local MySQL database for storage

**Ruby on Rails Stack**  
Create a Ruby on Rails stack using a single EC2 instance with a local MySQL database for storage

**WordPress blog**  
This template installs WordPress with a local MySQL database for storage

Multi\_AZ\_Simple

**LAMP Stack**  
Create a highly available, scalable LAMP stack with an Amazon RDS database instance for the backend data store

**Ruby on Rails Stack**  
Create a highly available, scalable Ruby on Rails stack with a multi-AZ MySQL Amazon RDS database instance for the backend data store

**WordPress blog**  
This template installs a highly-available, scalable WordPress deployment using a multi-az Amazon RDS database instance for storage

Choose a sample template ▲

S3 URL: Will be generated when sample template is selected

View in Designer

Cancel Next

3. Complete de parameters, including the "Stack name", "DBName", DBPassword, DBRootPassword, DBUser, the "Instance Type". Do not forget to elect an existing Keypair and a SSH location configurations, in this case allow connections from anywhere in the world (0.0.0.0/0).

Stack name

CloudFormationFirstExample

Stack name can include letters (A-Z and a-z), numbers (0-9), and dashes (-).

Parameters

Parameters are defined in your template and allow you to input custom values when you create or update a stack.

DBName  
MySQL database name  
MyDatabase

DBPassword  
Password for MySQL database access  
\*\*\*\*\*

DBRootPassword  
Root password for MySQL  
\*\*\*\*\*

DBUser  
Username for MySQL database access  
\*\*\*\*

InstanceType  
WebServer EC2 instance type  
t2.small

KeyName  
Name of an existing EC2 KeyPair to enable SSH access to the instance  
MyKeyPair

SSHLocation  
The IP address range that can be used to SSH to the EC2 instances  
0.0.0.0/0

4. In the window of Configure stack option. Do not

change the default parameters. Press "Next".

**Configure stack options**

**Tags**  
You can specify tags (key-value pairs) to apply to resources in your stack. You can add up to 50 unique tags for each stack.

No tags associated with the stack.

Add new tag

You can add 50 more tag(s)

**Permissions**

**IAM role - optional**  
Choose the IAM role for CloudFormation to use for all operations performed on the stack.

IAM role name ▼ Sample-role-name ▼ Remove ↻

**Stack failure options**

**Behavior on provisioning failure**  
Specify the roll back behavior for a stack failure. [Learn more](#)

☒ Roll back all stack resources

5. Review the summary and press next.

**Review CloudFormationFirstExample**

Step 1: Specify template Edit

**Prerequisite - Prepare template**

Template  
Use a sample template

**Template**

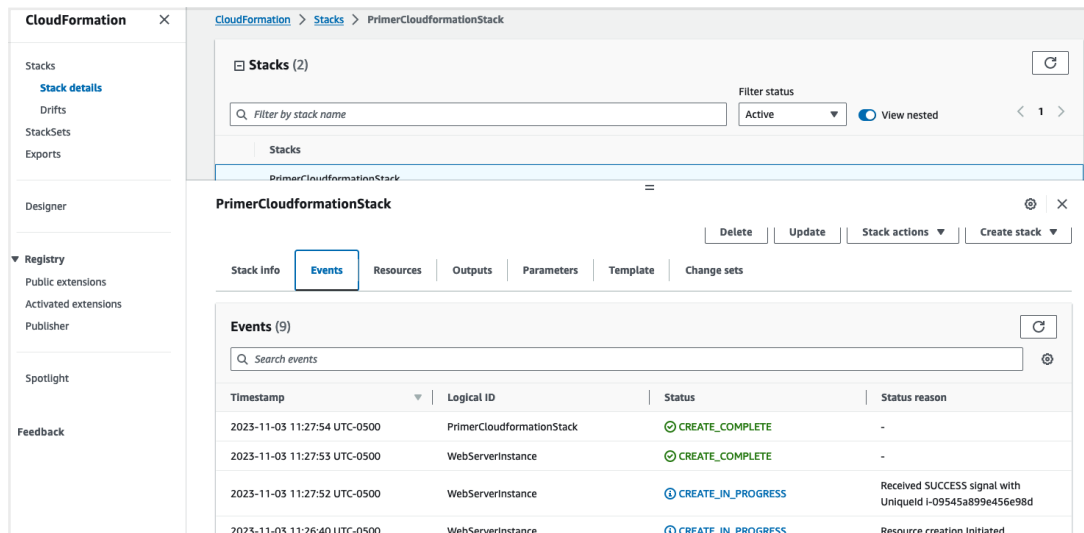
Template URL  
https://cloudformation-templates-us-east-1.s3.us-east-1.amazonaws.com/LAMP\_Single\_Instance.template

Stack description  
AWS CloudFormation Sample Template LAMP\_Single\_Instance: Create a LAMP stack using a single EC2 instance and a local MySQL database for storage. This template demonstrates using the AWS CloudFormation bootstrap scripts to install the packages and files necessary to deploy the Apache web server, PHP and MySQL at instance launch time. **\*\*WARNING\*\*** This template creates an Amazon EC2 instance. You will be billed for the AWS resources used if you create a stack from this template.

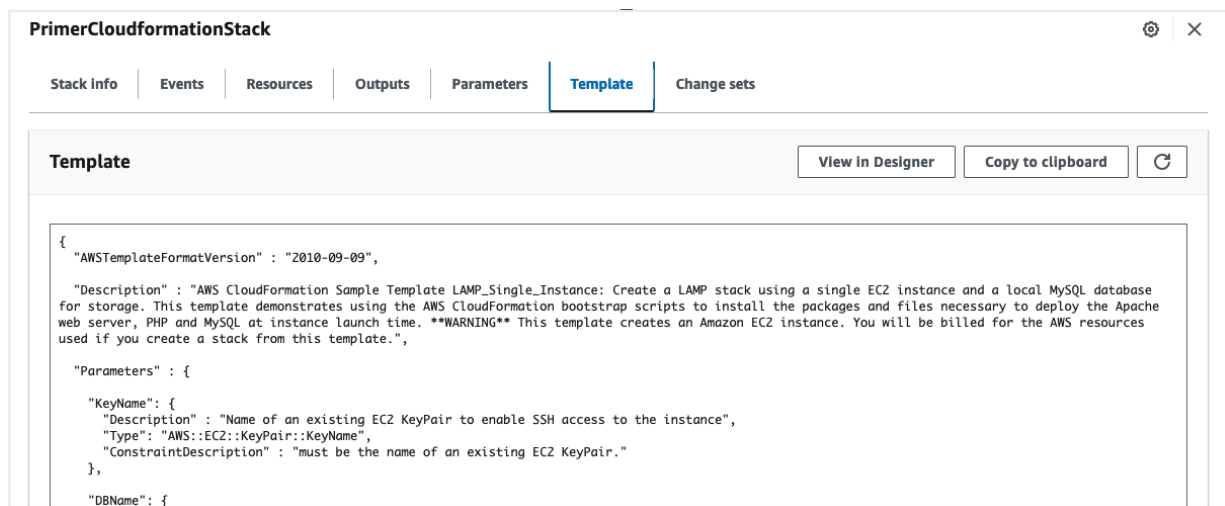
Step 2: Specify stack details Edit

**Stack name**

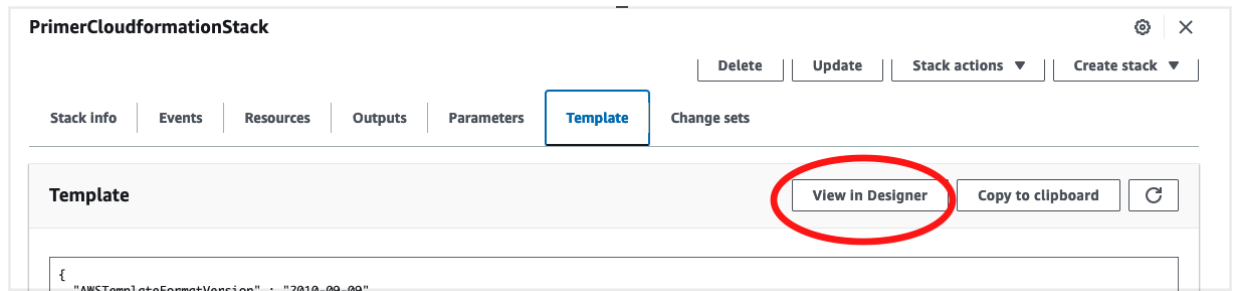
6. Navigate the Cloudformation dashboard and look for the events of your new stack



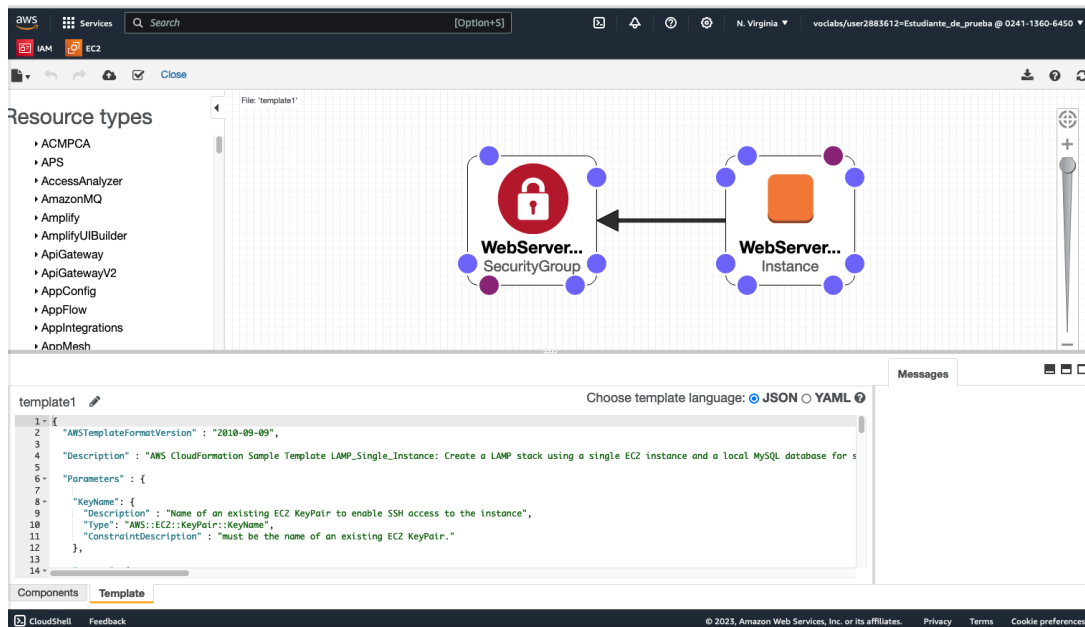
7. Navigate to the template "Tab" and look at it.



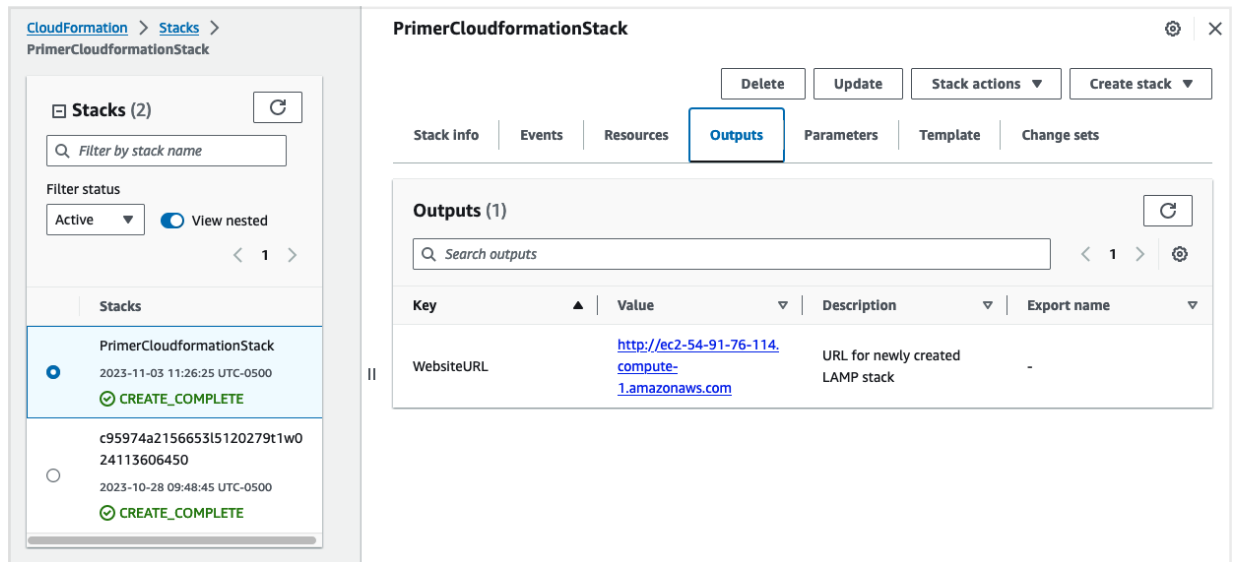
8. View the employe in the designer



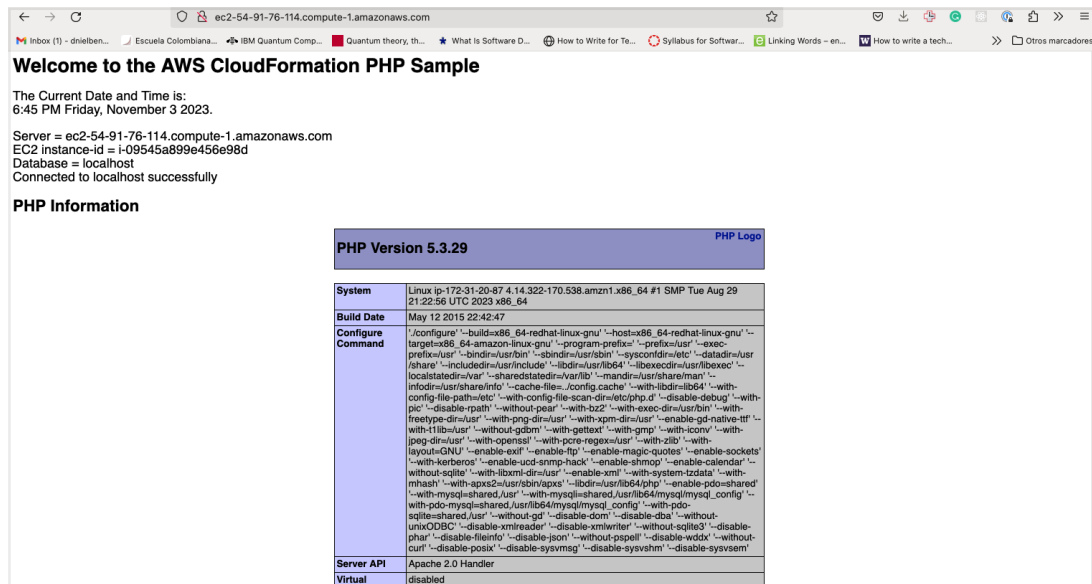
## 9. Explore the design.



## 10. Go to the "Outputs" tab and navigate to the suggested URL.



11. You have reached a PHP example hosted in the infrastructure you just created.



12. Delete the stack. All created resources will be deleted.

CloudFormation > Stacks > PrimerCloudformationStack

Stacks (2)

Filter by stack name

Filter status

Active View nested

< 1 >

Stacks

PrimerCloudformationStack

2023-11-03 11:26:25 UTC-0500

CREATE\_COMPLETE

c95974a215665315120279t1w024113606450

2023-10-28 09:48:45 UTC-0500

CREATE\_COMPLETE

PrimerCloudformationStack

Delete

Update

Stack actions

Create stack

Stack Info | Events | Resources | **Outputs** | Parameters | Template | Change sets

Outputs (1)

Search outputs

< 1 >

Key	Value	Description	Export name
WebsiteURL	<a href="http://ec2-54-91-76-114.compute-1.amazonaws.com">http://ec2-54-91-76-114.compute-1.amazonaws.com</a>	URL for newly created LAMP stack	-

Congratulations!