Cloud (AWS) - Task 1

Topic: Deploy application in monolithic and microservices architecture.

Task 1: For monolith: 1 EC2 instance, deploy WordPress and MYSQL on the same instances

- Configure the necessary security group for the instances

- EC2 instance type: t2-micro, AMI: ubuntu.

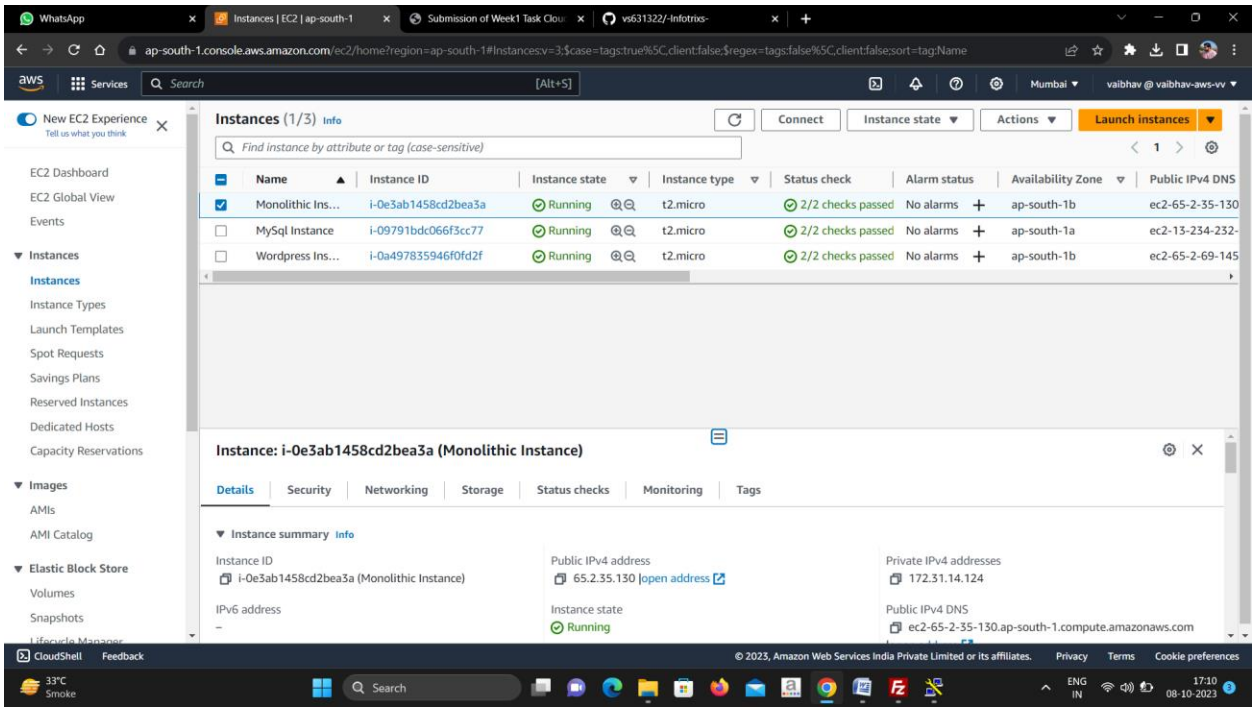
Task 2: For microservices: 2 EC2 instances, 1 for WordPress and EC2 instances, 1 for MYSQL.

Task 1: For monolith: 1 EC2 instance, deploy WordPress and MYSQL on the same instances.

➔ On the monolithic EC2 instance, install and configure WordPress and MySQL. Make sure they are running on the same instance.
➔ CREATE A SINGLE EC2 INSTANCE
➔ INSTALL APACHE , .PHP AND MYSQL.
➔ COMMANDS:-

```
sudo apt update
sudo apt install apache2
sudo systemctl start apache2
sudo apt-get install software-properties-common -y
sudo apt-get install php libapache2-mod-php php-mysql php-curl
phpgd php-json php-zip
```

```
sudo wget https://wordpress.org/latest.tar.gz
sudo tar -xvzf latest.tar.gz
sudo cp wp-config-sample.php wp-config.php
sudo chown -R www-data:www-data /var/www/WordPress
sudo cd /var/www/wordpress
sudo vim wp-config.php

sudo a2ensite wordpress.conf
sudo a2enmod rewrite
sudo apache2ctl configtest
sudo service apache2 restart

sudo apt update
sudo apt install mysql-server
sudo systemctl status mysql
sudo mysql
ALTER USER 'root'@'localhost' IDENTIFIED WITH
mysql_native_password BY '----------‘;

 CREATE DATABASE mysql_test;

USE mysql_test;

CREATE TABLE table1 (id INT, name VARCHAR(45));

INSERT INTO table1 VALUES(1, '-------');

SELECT * FROM table1;
```


Instances | EC2 | ap-south-1
Submission of Week1 Task Clou
vs631322/-Infotrixs-
ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#Instances:v=3;$case=tags:true%5C,client:false;$regex=tags:false%5C,client:false;sort=tag:Name
Services
Search
[Alt+S]
Mumbai
vaibhav @ vaibhav-aws-vv
New EC2 Experience
Tell us what you think
EC2 Dashboard
EC2 Global View
Events
Instances
Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Capacity Reservations
Images
AMIs
AMI Catalog
Elastic Block Store
Volumes
Snapshots
Instances (1/3) Info
Connect
Instance state
Actions
Launch instances
Find instance by attribute or tag (case-sensitive)
Name
Instance ID
Instance state
Instance type
Status check
Alarm status
Availability Zone
Public IPv4 DNS
Monolithic Ins...
i-0e3ab1458cd2bea3a
Running
t2.micro
2/2 checks passed
No alarms
ap-south-1b
ec2-65-2-35-130
MySql Instance
i-09791bdc066f3cc77
Running
t2.micro
2/2 checks passed
No alarms
ap-south-1a
ec2-13-234-232-
Wordpress Ins...
i-0a497835946f0fd2f
Running
t2.micro
2/2 checks passed
No alarms
ap-south-1b
ec2-65-2-69-145
Instance: i-0e3ab1458cd2bea3a (Monolithic Instance)
Details
Security
Networking
Storage
Status checks
Monitoring
Tags
Instance summary Info
Instance ID
i-0e3ab1458cd2bea3a (Monolithic Instance)
Public IPv4 address
65.2.35.130 open address
Private IPv4 addresses
172.31.14.124
IPv6 address
Instance state
Running
Public IPv4 DNS
ec2-65-2-35-130.ap-south-1.compute.amazonaws.com
CloudShell
Feedback
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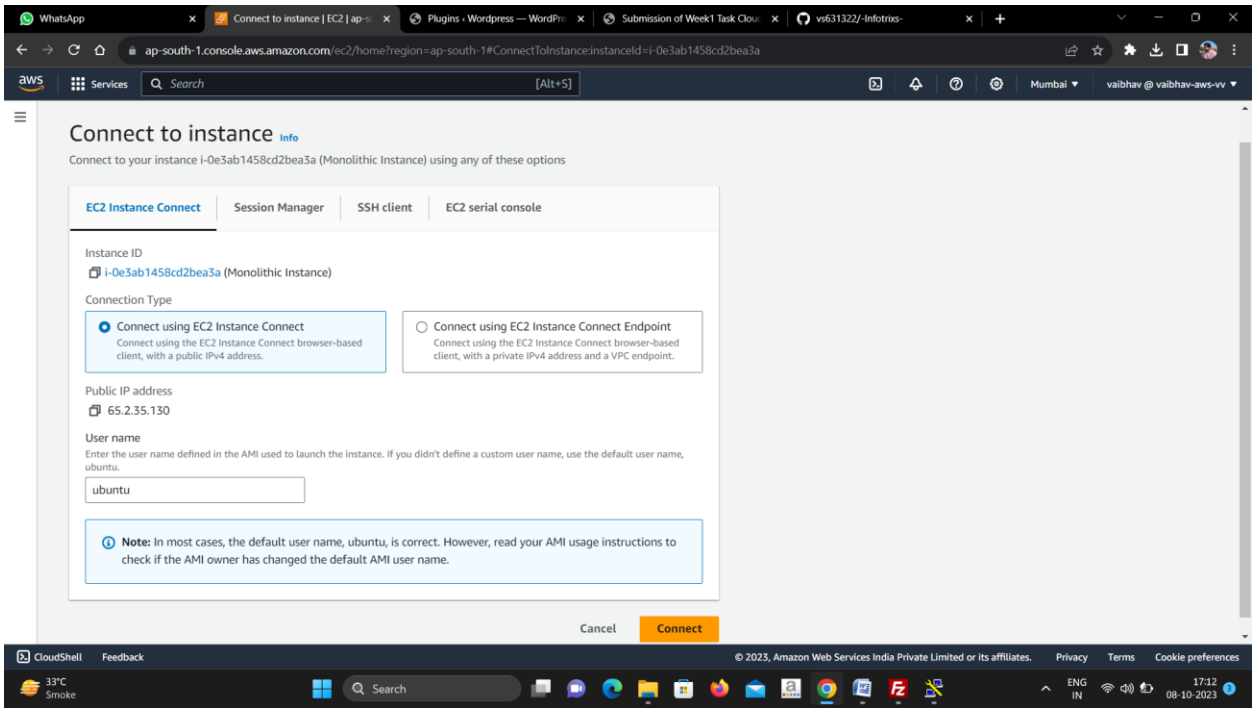
Privacy
Terms
Cookie preferences
33°C
Smoke
Search
ENG
IN
17:10
08-10-2023


Connect to instance | EC2 | ap-s
Plugins ‹ Wordpress — WordPr
Submission of Week1 Task Clou
vs631322/-Infotrixs-
ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#ConnectToInstance:instanceId=i-0e3ab1458cd2bea3a
Services
Search
[Alt+S]
Mumbai
vaibhav @ vaibhav-aws-vv
Connect to instance Info
Connect to your instance i-0e3ab1458cd2bea3a (Monolithic Instance) using any of these options
EC2 Instance Connect
Session Manager
SSH client
EC2 serial console
Instance ID
i-0e3ab1458cd2bea3a (Monolithic Instance)
Connection Type
Connect using EC2 Instance Connect
Connect using the EC2 Instance Connect browser-based client, with a public IPv4 address.
Connect using EC2 Instance Connect Endpoint
Connect using the EC2 Instance Connect browser-based client, with a private IPv4 address and a VPC endpoint.
Public IP address
65.2.35.130
User name
Enter the user name defined in the AMI used to launch the instance. If you didn't define a custom user name, use the default user name, ubuntu.
ubuntu
Note: In most cases, the default user name, ubuntu, is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI user name.
Cancel
Connect
CloudShell
Feedback
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Privacy
Terms
Cookie preferences
33°C
Smoke
Search
ENG
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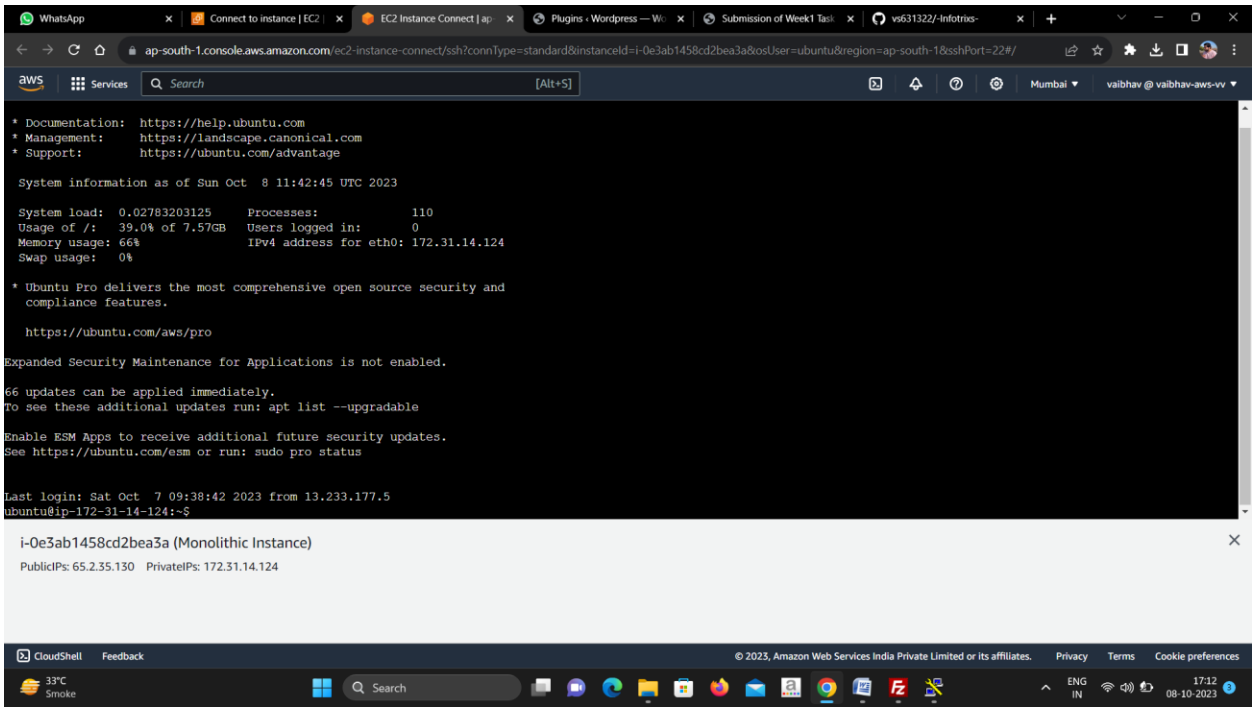
17:12
08-10-2023


WhatsApp
Connect to instance | EC2 |
EC2 Instance Connect | ap
Plugins ‹ Wordpress — We
Submission of Week1 Task
vs631322/-Infotrixs-
ap-south-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-0e3ab1458cd2bea3a&osUser=ubuntu&region=ap-south-1&sshPort=22#/
aws
Services
Search
[Alt+S]
Mumbai
vaibhav @ vaibhav-aws-vv
* Documentation: https://help.ubuntu.com
* Management: https://landscape.canonical.com
* Support: https://ubuntu.com/advantage
System information as of Sun Oct 8 11:42:45 UTC 2023
System load: 0.02783203125 Processes: 110
Usage of /: 39.0% of 7.57GB Users logged in: 0
Memory usage: 66% IPv4 address for eth0: 172.31.14.124
Swap usage: 0%
* Ubuntu Pro delivers the most comprehensive open source security and compliance features.
https://ubuntu.com/aws/pro
Expanded Security Maintenance for Applications is not enabled.
66 updates can be applied immediately.
To see these additional updates run: apt list --upgradable
Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status
Last login: Sat Oct 7 09:38:42 2023 from 13.233.177.5
ubuntu@ip-172-31-14-124:~$
i-0e3ab1458cd2bea3a (Monolithic Instance)
PublicIPs: 65.2.35.130 PrivateIPs: 172.31.14.124
CloudShell
Feedback
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Cookie preferences
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Smoke
Search
ENG
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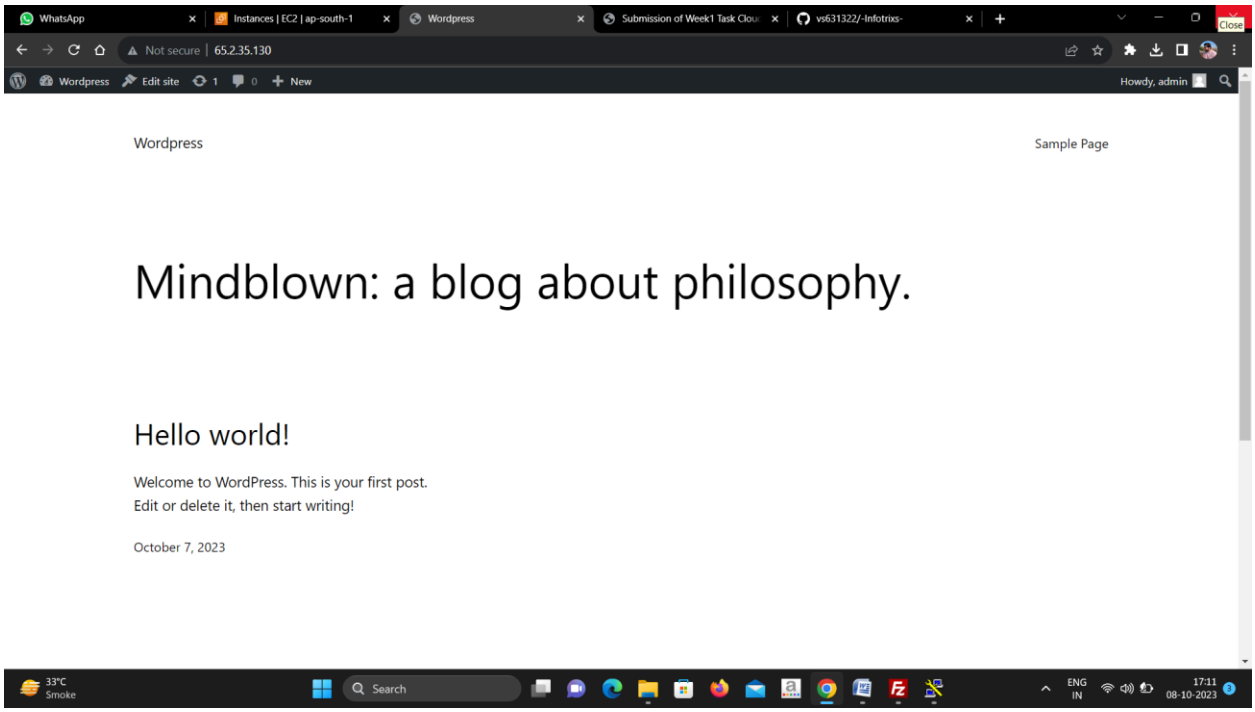
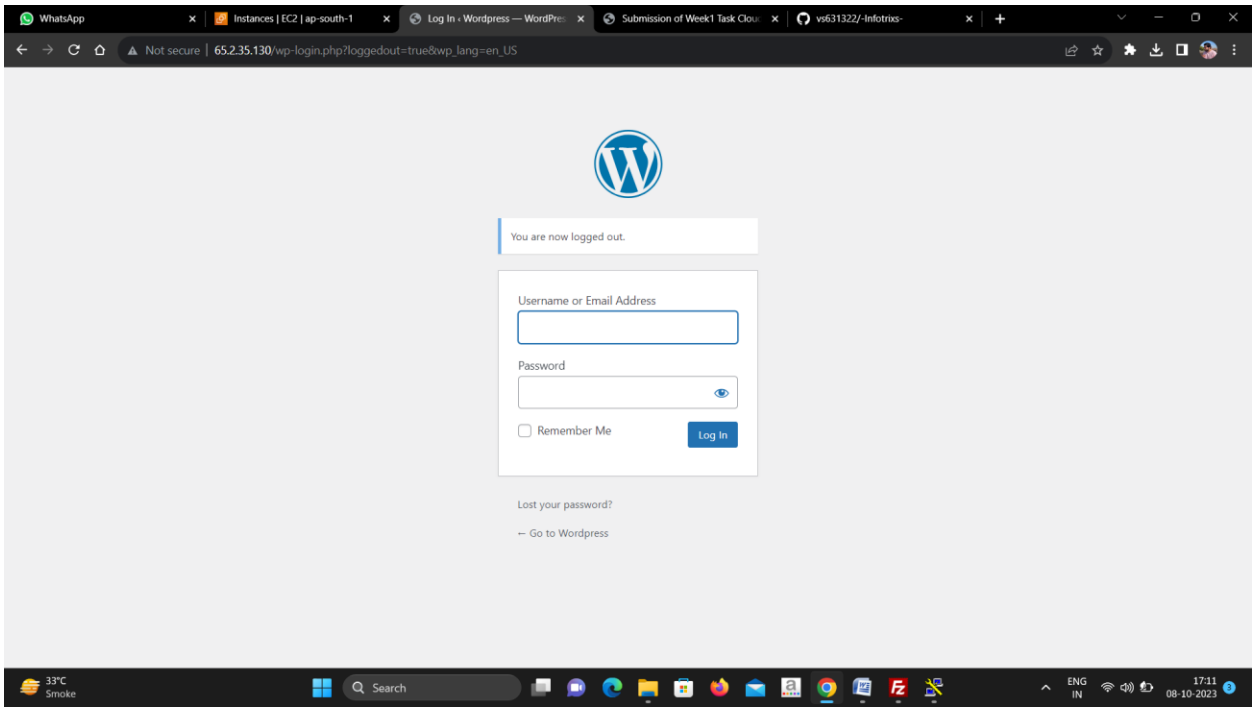
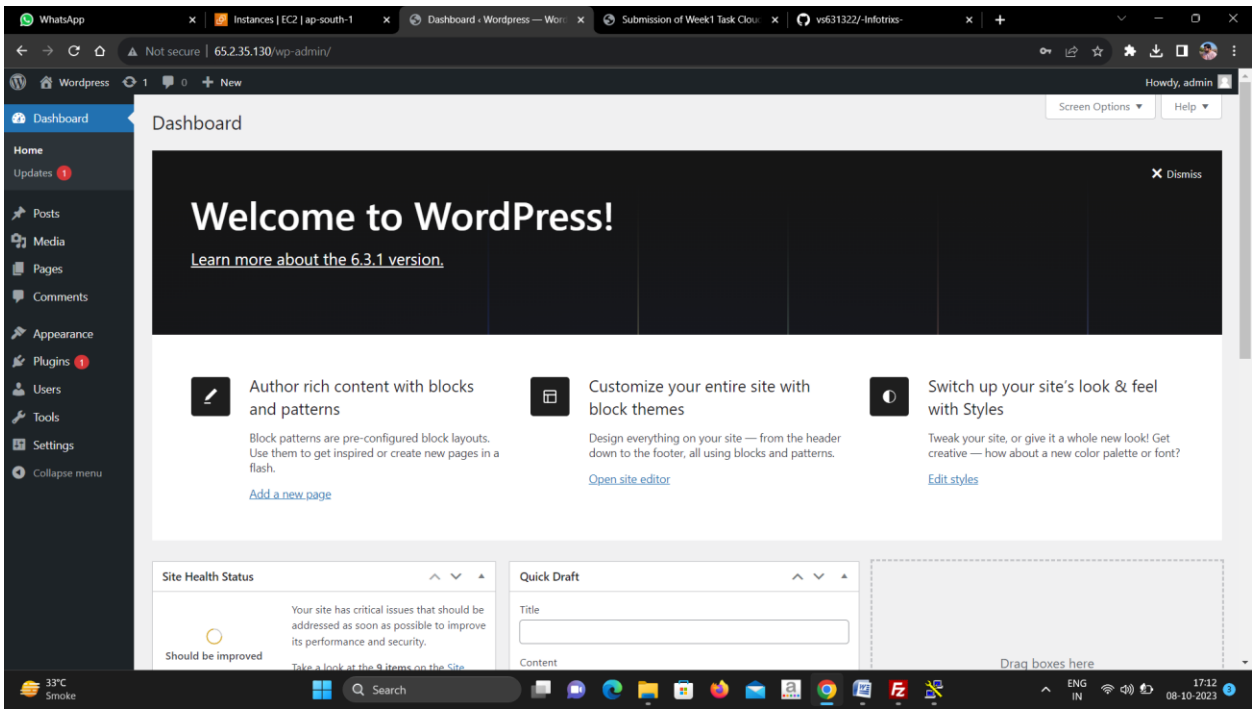
17:12
08-10-2023

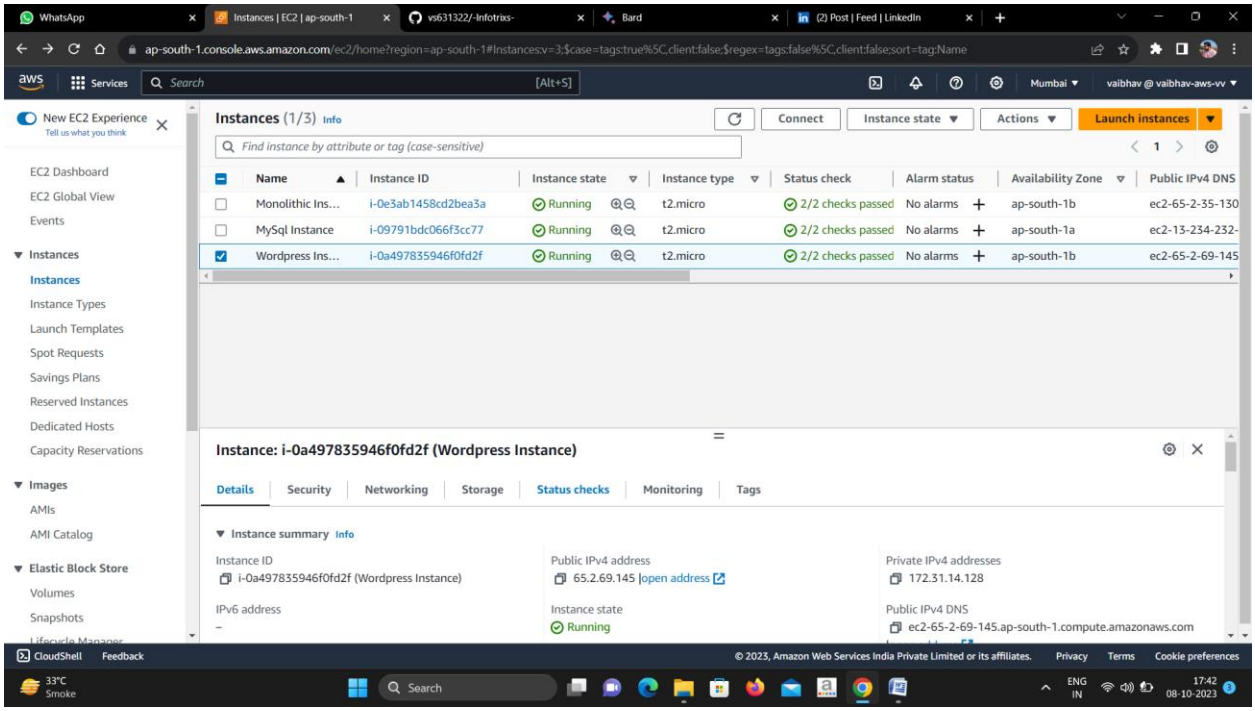

WhatsApp
Instances | EC2 | ap-south-1
Wordpress
Submission of Week1 Task Clou
vs631322/-Infotrixs-
Close
Not secure | 65.2.35.130
Wordpress
Edit site
1
0
New
Howdy, admin
Wordpress
Sample Page
Mindblown: a blog about philosophy.
Hello world!
Welcome to WordPress. This is your first post.
Edit or delete it, then start writing!
October 7, 2023
33°C
Smoke
Search
ENG
IN
17:11
08-10-2023

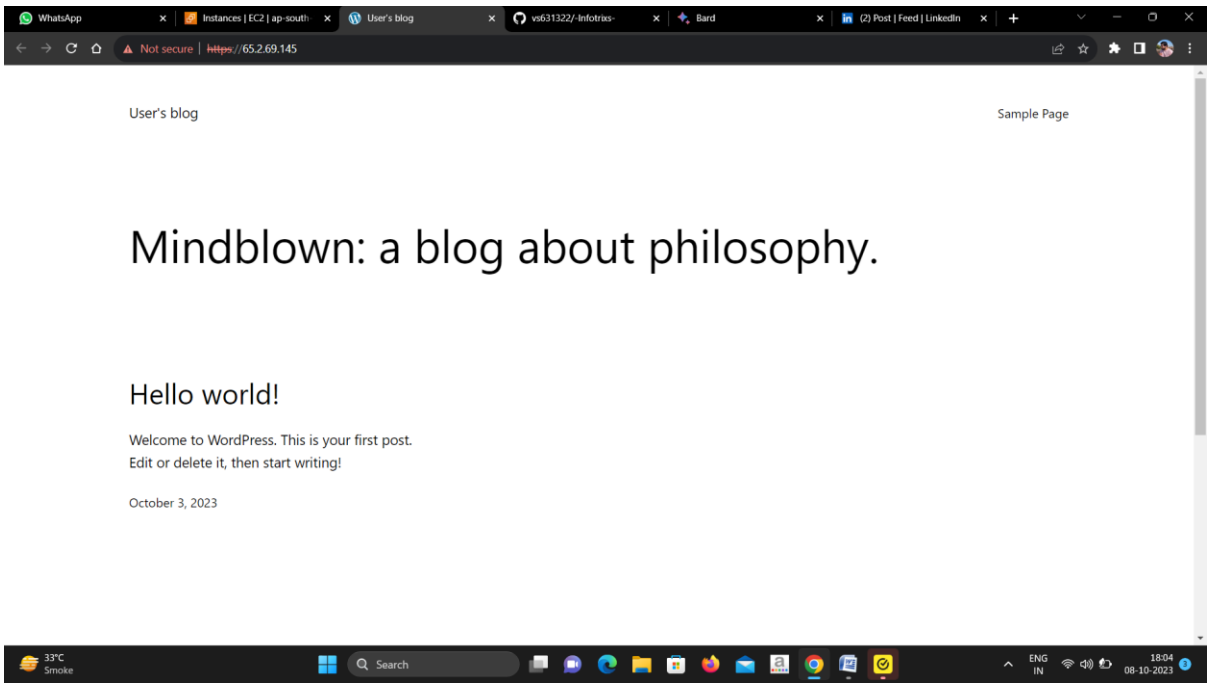

WhatsApp
Instances | EC2 | ap-south-1
Log In ‹ Wordpress — WordPress
Submission of Week1 Task Clou
vs631322/-Infotrixs-
Not secure | 65.2.35.130/wp-login.php?loggedout=true&wp_lang=en_US
You are now logged out.
Username or Email Address
Password
Remember Me
Log In
Lost your password?
← Go to Wordpress
33°C
Smoke
Search
ENG
IN
17:11
08-10-2023

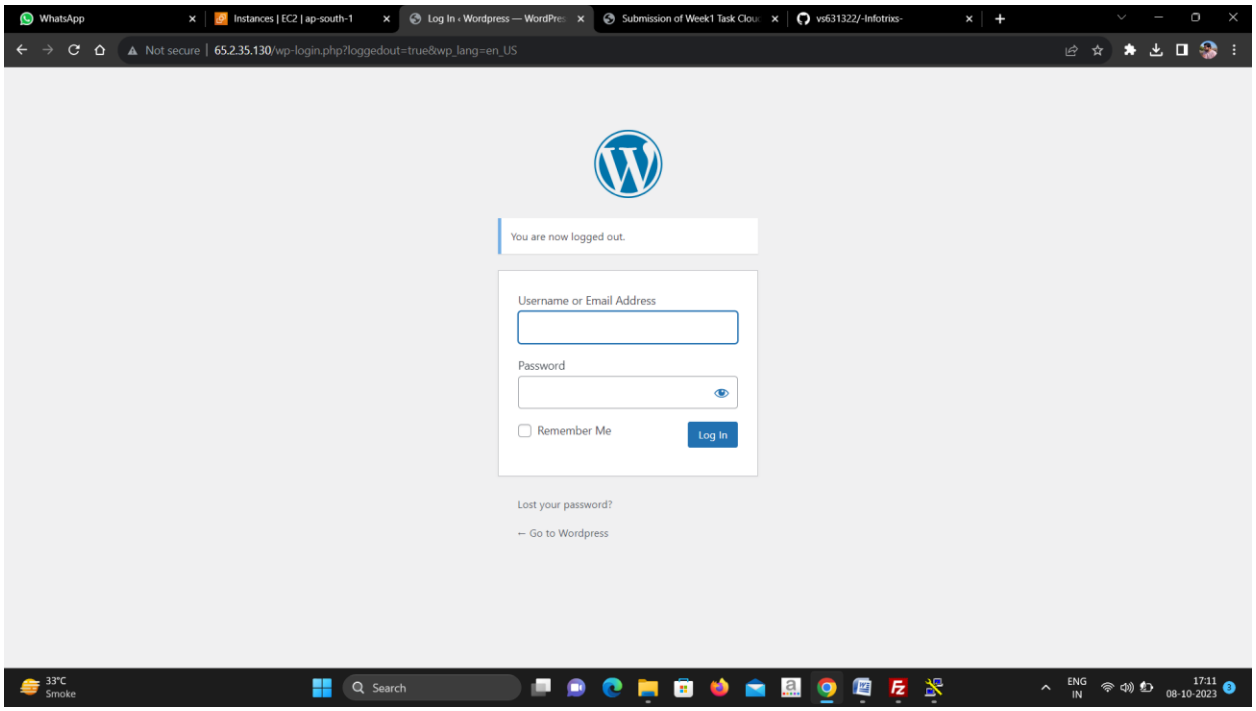

WhatsApp
Instances | EC2 | ap-south-1
Dashboard ‹ Wordpress — Wor
Submission of Week1 Task Clou
vs631322/-Infotrixs-
Not secure | 65.2.35.130/wp-admin/
Wordpress
New
Howdy, admin
Screen Options
Help
Dashboard
Home
Updates
Posts
Media
Pages
Comments
Appearance
Plugins
Users
Tools
Settings
Collapse menu
Dismiss
Welcome to WordPress!
Learn more about the 6.3.1 version.
Author rich content with blocks and patterns
Block patterns are pre-configured block layouts. Use them to get inspired or create new pages in a flash.
Add a new page
Customize your entire site with block themes
Design everything on your site — from the header down to the footer, all using blocks and patterns.
Open site editor
Switch up your site's look & feel with Styles
Tweak your site, or give it a whole new look! Get creative — how about a new color palette or font?
Edit styles
Site Health Status
Should be improved
Your site has critical issues that should be addressed as soon as possible to improve its performance and security.
Quick Draft
Title
Content
Drag boxes here
33°C
Smoke
Search
ENG
IN
17:12
08-10-2023

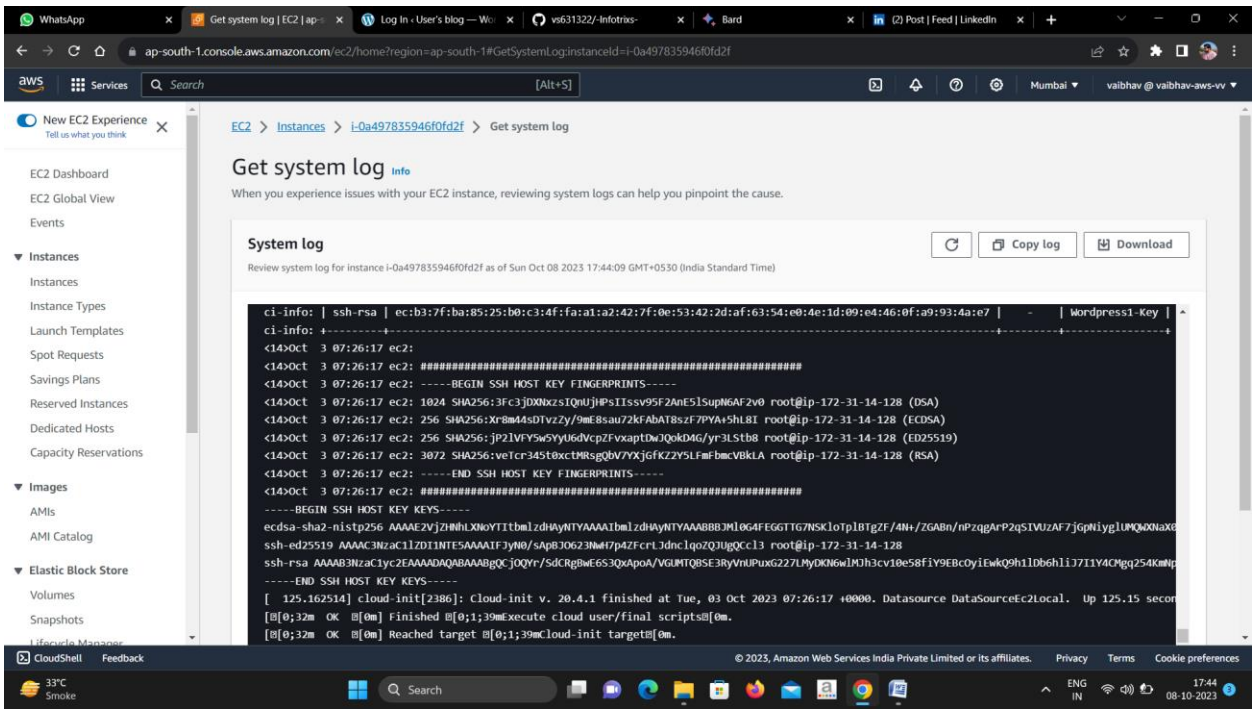
Task 2: For microservices: 2 EC2 instances, 1 for WordPress and EC2 instances, 1 for MYSQL.

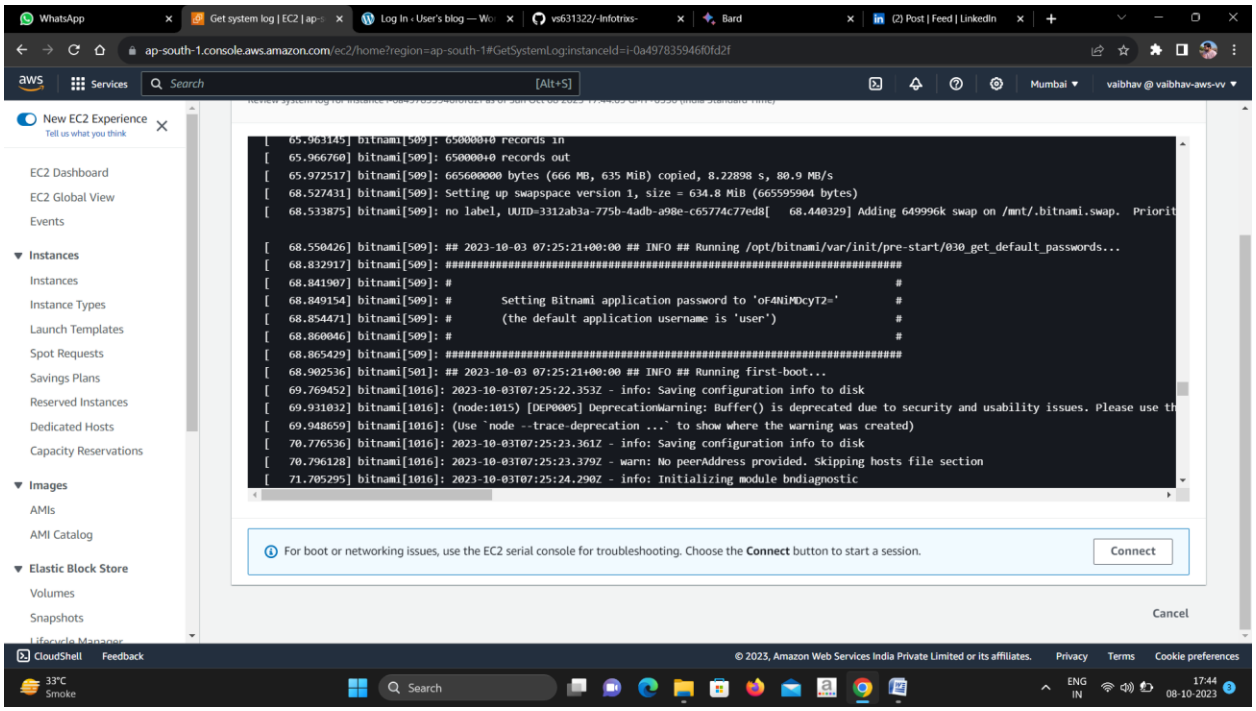
➔ CREATE EC2 INSTANCE FOR WORDPRESS

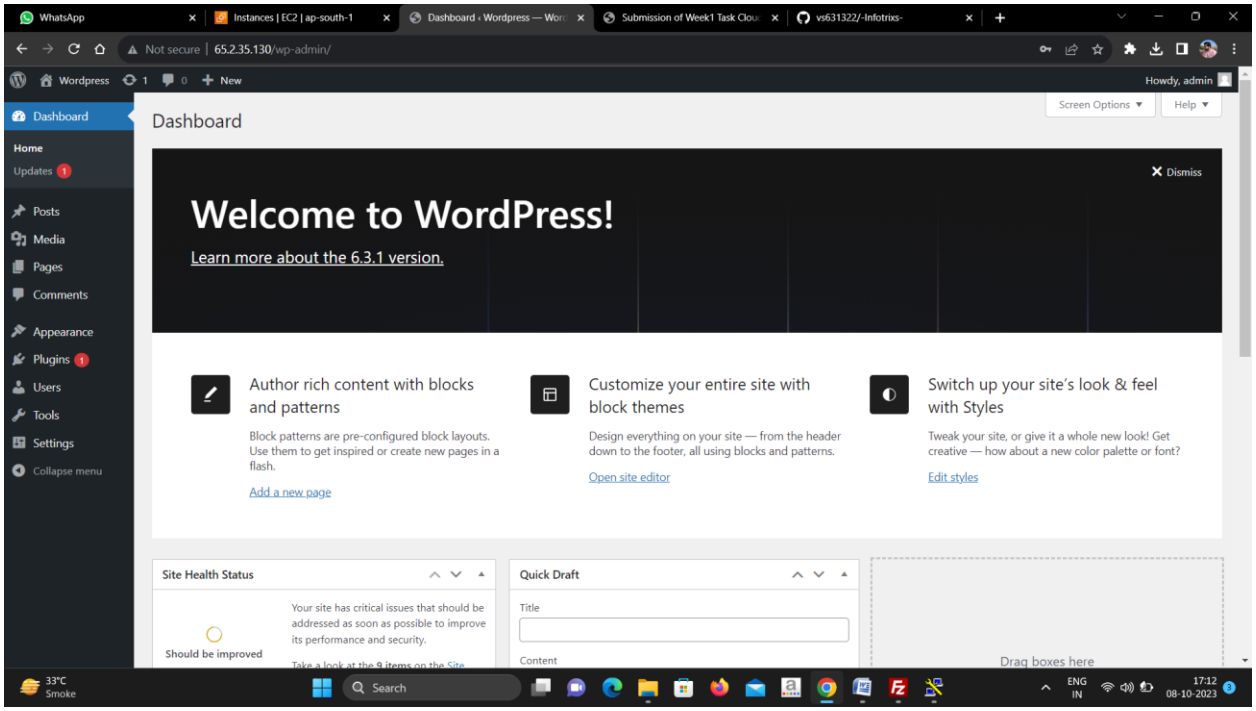
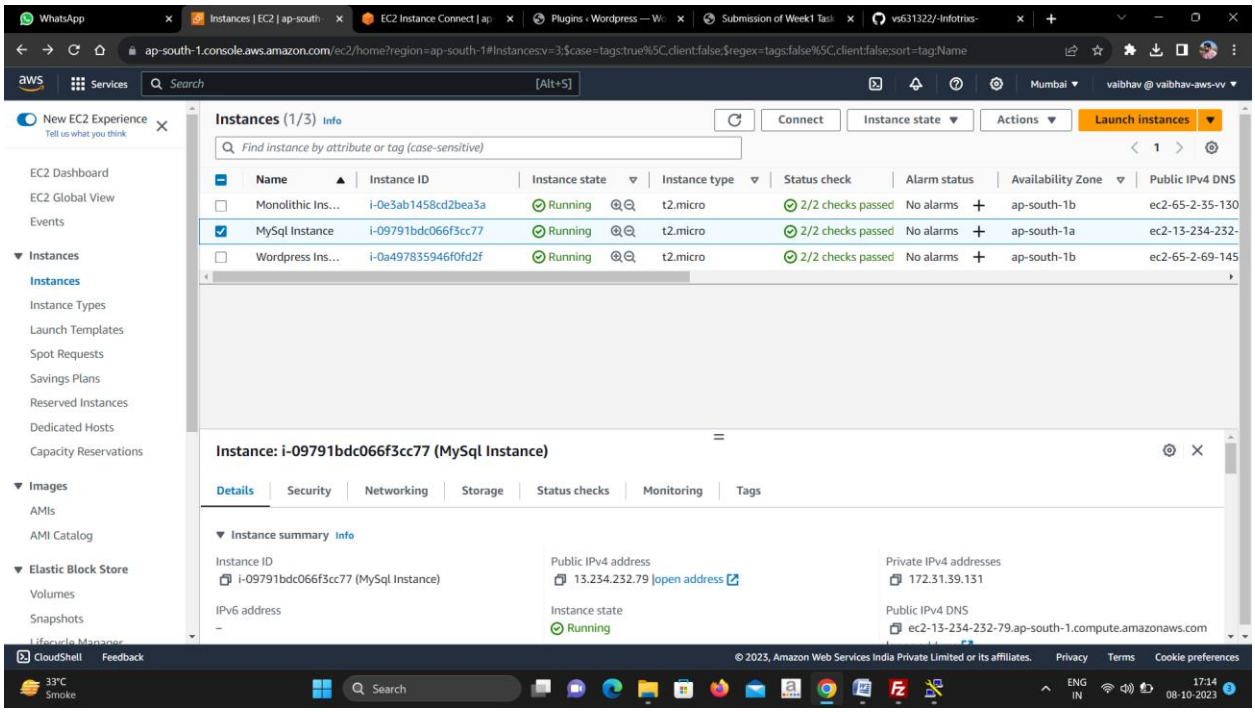
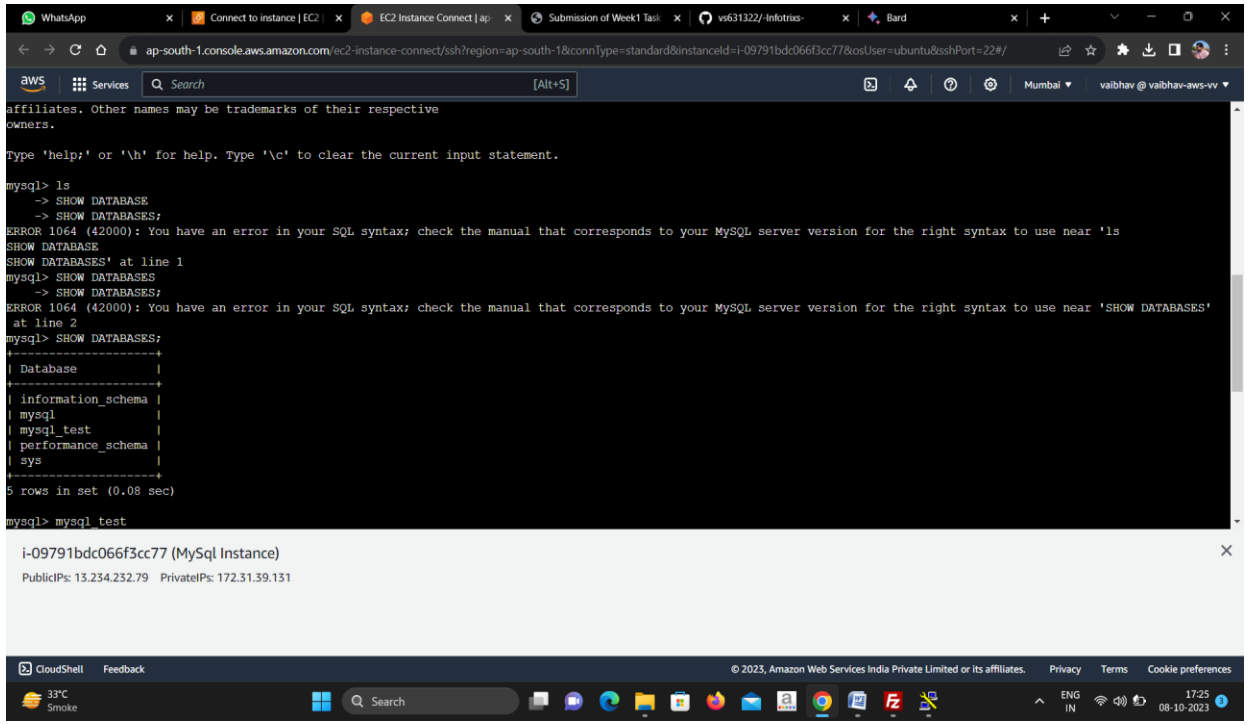





WhatsApp
Instances | EC2 | ap-south-1
Log In ‹ Wordpress — WordPress
Submission of Week1 Task Clou
vs631322/-Infotrixs-
Not secure | 65.2.35.130/wp-login.php?loggedout=true&wp_lang=en_US
You are now logged out.
Username or Email Address
Password
Remember Me
Log In
Lost your password?
← Go to Wordpress
33°C
Smoke
Search
ENG
IN
17:11
08-10-2023


WhatsApp
Get system log | EC2 | ap-s
Log In ‹ User's blog — Wo
vs631322/-Infotrixs-
Bard
(2) Post | Feed | LinkedIn
ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#GetSystemLog:instanceId=i-0a497835946f0fd2f
aws
Services
Search
[Alt+S]
Mumbai
vaibhav @ vaibhav-aws-vv
New EC2 Experience
Tell us what you think
EC2 Dashboard
EC2 Global View
Events
Instances
Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Capacity Reservations
Images
AMIs
AMI Catalog
Elastic Block Store
Volumes
Snapshots
EC2 > Instances > i-0a497835946f0fd2f > Get system log
Get system log Info
When you experience issues with your EC2 instance, reviewing system logs can help you pinpoint the cause.
System log
Review system log for instance i-0a497835946f0fd2f as of Sun Oct 08 2023 17:44:09 GMT+0530 (India Standard Time)
Copy log
Download
ci-info: | ssh-rsa | ec:b3:7f:ba:85:25:b0:c3:4f:fa:a1:a2:42:7f:0e:53:42:2d:af:63:54:e0:4e:1d:09:e4:46:0f:a9:93:4a:e7 | - | Wordpress1-Key |
ci-info: +---------+---+---------+----------------+
<14>Oct 3 07:26:17 ec2:
<14>Oct 3 07:26:17 ec2: ###
<14>Oct 3 07:26:17 ec2: -----BEGIN SSH HOST KEY FINGERPRINTS-----
<14>Oct 3 07:26:17 ec2: 1024 SHA256:3Fc3jDXNxzsIQnUjHPsIIssv95F2AnE5lSupN6AF2v0 root@ip-172-31-14-128 (DSA)
<14>Oct 3 07:26:17 ec2: 256 SHA256:Xr8m44sDTvzZy/9mE8sau72kFAbAT8szF7PYA+5hL8I root@ip-172-31-14-128 (ECDSA)
<14>Oct 3 07:26:17 ec2: 256 SHA256:jP2lVFY5w5YyU6dVcpZFvxaptDwJQokD4G/yr3LStb8 root@ip-172-31-14-128 (ED25519)
<14>Oct 3 07:26:17 ec2: 3072 SHA256:veTcr345t0xctMRsgQbV7YXjGfKZ2Y5LFmFbmcVBkLA root@ip-172-31-14-128 (RSA)
<14>Oct 3 07:26:17 ec2: -----END SSH HOST KEY FINGERPRINTS-----
<14>Oct 3 07:26:17 ec2: ###
-----BEGIN SSH HOST KEY KEYS-----
ecdsa-sha2-nistp256 AAAAE2VjZHNhLXNoYTItbmlzdHAyNTYAAAAIbmlzdHAyNTYAAABBBJMl0G4FEGGTTG7NSKloTplBTgZF/4N+/ZGABn/nPzqgArP2qSIVUzAF7jGpNiyglUMQWXNaX8
ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAAIFJyN0/sApBJO623NwH7p4ZFcrLJdnclqoZQJUgQCcl3 root@ip-172-31-14-128
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABgQCjOQYr/SdCRgBwE6S3QxApoA/VGUMTQBSE3RyVnUPuxG227LMyDKN6wlMJh3cv10e58fiY9EBcOyiEwkQ9h1lDb6hliJ7I1Y4CMgq254KmNp
-----END SSH HOST KEY KEYS-----
[125.162514] cloud-init[2386]: Cloud-init v. 20.4.1 finished at Tue, 03 Oct 2023 07:26:17 +0000. Datasource DataSourceEc2Local. Up 125.15 secon
[[0;32m OK [0m] Finished [0;1;39mExecute cloud user/final scripts[0m.
[[0;32m OK [0m] Reached target [0;1;39mCloud-init target[0m.
CloudShell
Feedback
© 2023, Amazon Web Services India Private Limited or its affiliates.
Privacy
Terms
Cookie preferences
33°C
Smoke
Search
ENG
IN
17:44
08-10-2023


ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#GetSystemLog:instanceId=i-0a497835946f0fd2f
Search
[Alt+S]
Mumbai
vaibhav @ vaibhav-aws-vv
New EC2 Experience
Tell us what you think
EC2 Dashboard
EC2 Global View
Events
Instances
Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Capacity Reservations
Images
AMIs
AMI Catalog
Elastic Block Store
Volumes
Snapshots
[65.963145] bitnami[509]: 650000+0 records in
[65.966760] bitnami[509]: 650000+0 records out
[65.972517] bitnami[509]: 665600000 bytes (666 MB, 635 MiB) copied, 8.22898 s, 80.9 MB/s
[68.527431] bitnami[509]: Setting up swapspace version 1, size = 634.8 MiB (665595904 bytes)
[68.533875] bitnami[509]: no label, UUID=3312ab3a-775b-4adb-a98e-c65774c77ed8[68.440329] Adding 649996k swap on /mnt/.bitnami.swap. Priorit
[68.550426] bitnami[509]: ## 2023-10-03 07:25:21+00:00 ## INFO ## Running /opt/bitnami/var/init/pre-start/030_get_default_passwords...
[68.832917] bitnami[509]: ##
[68.841907] bitnami[509]: # #
[68.849154] bitnami[509]: # Setting Bitnami application password to 'oF4NiMDcyT2=' #
[68.854471] bitnami[509]: # (the default application username is 'user') #
[68.860046] bitnami[509]: # #
[68.865429] bitnami[509]: ##
[68.902536] bitnami[501]: ## 2023-10-03 07:25:21+00:00 ## INFO ## Running first-boot...
[69.769452] bitnami[1016]: 2023-10-03T07:25:22.353Z - info: Saving configuration info to disk
[69.931032] bitnami[1016]: (node:1015) [DEP0005] DeprecationWarning: Buffer() is deprecated due to security and usability issues. Please use th
[69.948659] bitnami[1016]: (Use `node --trace-deprecation ...` to show where the warning was created)
[70.776536] bitnami[1016]: 2023-10-03T07:25:23.361Z - info: Saving configuration info to disk
[70.796128] bitnami[1016]: 2023-10-03T07:25:23.379Z - warn: No peerAddress provided. Skipping hosts file section
[71.705295] bitnami[1016]: 2023-10-03T07:25:24.290Z - info: Initializing module bndiagnostic
For boot or networking issues, use the EC2 serial console for troubleshooting. Choose the Connect button to start a session.
Connect
Cancel
CloudShell
Feedback
© 2023, Amazon Web Services India Private Limited or its affiliates.
Privacy
Terms
Cookie preferences
33°C
Smoke
Search
ENG
IN
17:44
08-10-2023


Not secure | 65.2.35.130/wp-admin/
Wordpress
New
Howdy, admin
Dashboard
Home
Updates
Posts
Media
Pages
Comments
Appearance
Plugins
Users
Tools
Settings
Collapse menu
Screen Options
Help
Dismiss
Welcome to WordPress!
Learn more about the 6.3.1 version.
Author rich content with blocks and patterns
Block patterns are pre-configured block layouts. Use them to get inspired or create new pages in a flash.
Add a new page
Customize your entire site with block themes
Design everything on your site — from the header down to the footer, all using blocks and patterns.
Open site editor
Switch up your site's look & feel with Styles
Tweak your site, or give it a whole new look! Get creative — how about a new color palette or font?
Edit styles
Site Health Status
Should be improved
Your site has critical issues that should be addressed as soon as possible to improve its performance and security.
Quick Draft
Title
Content
Drag boxes here
33°C
Smoke
Search
ENG
IN
17:12
08-10-2023

➔ CREATE EC2 INSTANCE FOR MYSQL