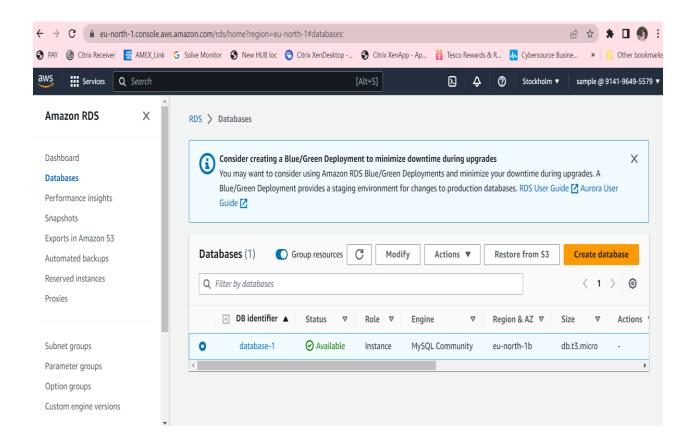
Create, Integrate, Manage and Deploy WordPress application using RDS in AWS

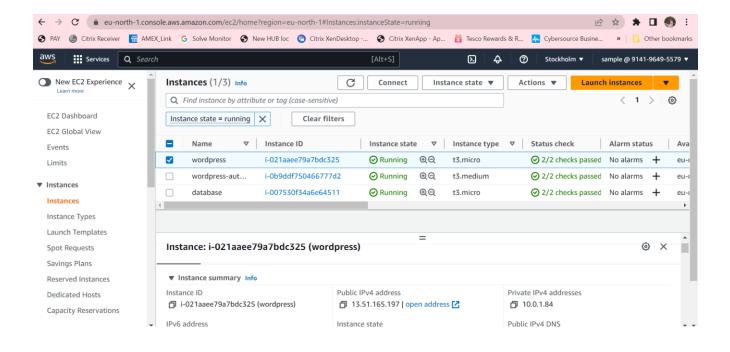
This Labs are divided into five short modules.

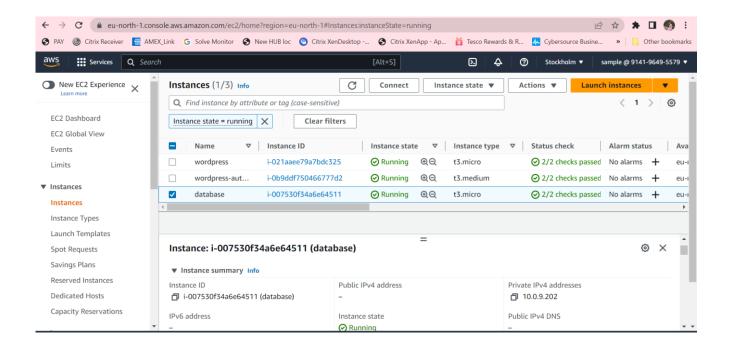
- Creating a MySQL Database with RDS: Configure the RDS database to allow access to specificentities.
- Creating an EC2 Instance: Create an EC2 instance to run WordPress site.
- Configuring Your RDS Database: Configure the RDS database to allow access to specific entities.
- Configuring WordPress on EC2: Install the WordPress application and dependencies on the EC2instance.
- Explore your New Web Site and Clean Up: Clean up the resources created in this lab so that you will not be charged

1) Creating a MySQL Database with RDS



2) Creating an EC2 Instance:





3) Configuring Your RDS Database:

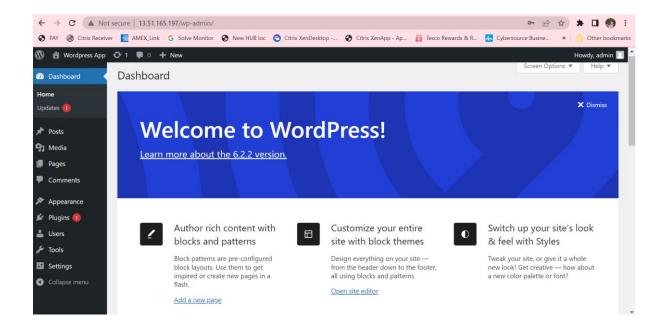
4) Configuring WordPress on EC2:

```
[ec2-user@ip-10-0-1-84 wordpress]$ sudo yum -y install httpd
Loaded plugins: extras_suggestions, langmacks, priorities, update-motd
Package httpd-2.4.57-1.amzn2.x86_64 already installed and latest version
Nothing to do
[ec2-user@ip-10-0-1-84 wordpress]$ sudo systemctl enable httpd
Created symlink from /etc/systemd/system/multi-user.target.wants/httpd.service to /usr/lib/systemd/system/httpd.service.
[ec2-user@ip-10-0-1-84 wordpress]$ sudo systemctl start httpd
[ec2-user@ip-10-0-1-84 wordpress]$ sudo systemctl status httpd

• httpd.service - The Apache HTTP Server
Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; vendor preset: disabled)
Active: active (running) since Fri 2023-06-23 12:55:09 UTC; 9s ago
Docs: man:httpd.service(8)

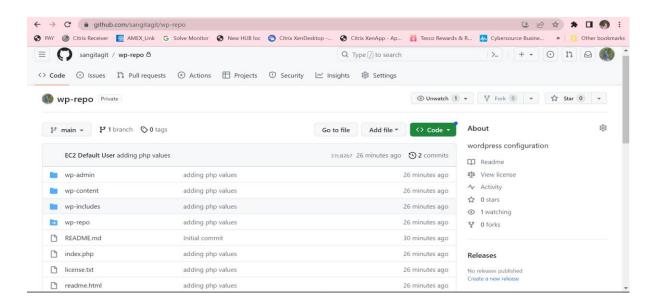
Main PID: 2810 (httpd)
Status: "Total requests: 0; Idle/Busy workers 100/0;Requests/sec: 0; Bytes served/sec: 0 B/sec"
CGroup: /system.slice/httpd.service
|-2810 /usr/sbin/httpd -DFOREGROUND
|-2811 /usr/sbin/httpd -DFOREGROUND
|-2813 /usr/sbin/httpd -DFOREGROUND
|-2814 /usr/sbin/httpd -DFOREGROUND
|-2840 /usr/sbin/httpd -DFOREGROUND
```

5) Explore your New Web Site and Clean Up



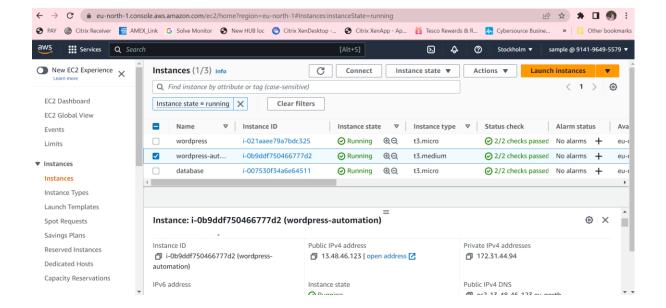
Pushing the config files to Git

```
[ec2-user@ip-10-0-1-84 wordpress]$ sudo systemctl restart httpd
[ec2-user@ip-10-0-1-84 wordpress]$ sudo yum -y install git
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
Resolving Dependencies
--> Running transaction check
---> Package git.x86_64 0:2.40.1-1.amzn2.0.1 will be installed
--> Processing Dependency: perl-Git = 2.40.1-1.amzn2.0.1 for package: git-2.40.1-1.amzn2.0.1.x86_64
--> Processing Dependency: git-core-doc = 2.40.1-1.amzn2.0.1 for package: git-2.40.1-1.amzn2.0.1.x86_64
--> Processing Dependency: git-core = 2.40.1-1.amzn2.0.1 for package: git-2.40.1-1.amzn2.0.1.x86_64
--> Processing Dependency: perl(Term::ReadKey) for package: git-2.40.1-1.amzn2.0.1.x86_64
--> Processing Dependency: perl(Git) for package: git-2.40.1-1.amzn2.0.1.x86_64
--> Running transaction check
---> Package git-core.x86_64 0:2.40.1-1.amzn2.0.1 will be installed
---> Package git-core-doc.noarch 0:2.40.1-1.amzn2.0.1 will be installed
---> Package perl-Git.noarch 0:2.40.1-1.amzn2.0.1 will be installed
--> Processing Dependency: perl(Error) for package: perl-Git-2.40.1-1.amzn2.0.1.noarch
---> Package perl-TermReadKey.x86_64 0:2.30-20.amzn2.0.2 will be installed
--> Running transaction check
 --> Package perl-Error.noarch 1:0.17020-2.amzn2 will be installed
 -> Finished Dependency Resolution
Dependencies Resolved
```



```
[ec2-user@ip-10-0-1-84 wordpress]$ git clone https://github.com/sangitagit/wp-repo.git
Cloning into 'wp-repo'...
Username for 'https://github.com': sangitagit
Password for 'https://sangitagit@github.com':
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
Receiving objects: 100% (3/3), done.
Receiving objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
[ec2-user@ip-10-0-1-84 wordpress]$ cd wp-repo
[ec2-user@ip-10-0-1-84 wp-repo]$ cd ..
[ec2-user@ip-10-0-1-84 wp-repo]$ cd wp-repo
[ec2-user@ip-10-0-1-84 wp-repo]$ pwd
/home/ec2-user/wordpress/wp-repo
[ec2-user@ip-10-0-1-84 wordpress]$ cd ..
[ec2-user@ip-10-0-1-84 wordpress]$ cd ...
[ec2-user@ip-10-0-1-84 wordpress]$ cd ...
[ec2-user@ip-10-0-1-84 wordpress]$ cd ...
[ec2-user@ip-10-0-1-84 wordpress]$ cd ...
[ec2-user@ip-10-0-1-85 wordpress]$ cd ...
[ec2-user@ip-10-0-1-86 wordpress]$ cd ...
[ec2-user@ip-10-0-1-87 wordpress]$ cd ...
[ec2-user@ip-10-0-1-88 wordpress]$ cd ...
[ec2-user@ip-10-0-1-80 wordpress]$ cd ...
[ec2-u
```

```
[ec2-user@ip-10-0-1-84 wp-repo]$ git push
Username for 'https://github.com': sangitagit
Password for 'https://sangitagit@github.com':
Enumerating objects: 3129, done.
Counting objects: 100% (3129/3129), done.
Delta compression using up to 2 threads
Compressing objects: 100% (3048/3048), done.
Writing objects: 100% (3128/3128), 19.39 MiB | 7.19 MiB/s, done.
Total 3128 (delta 395), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (395/395), done.
To https://github.com/sangitagit/wp-repo.git
121805f..37c82b7 main -> main
[ec2-user@ip-10-0-1-84 wp-repo]$ |
```



JENKINS AUTOMATION

```
[ec2-user@ip-172-31-44-94 "]$ sudo yum -y install java-11*
Loaded plugins: extrax_suggestions, langpacks, priorities, update-motd
Resolving Dependencies

-> Running transaction check

-> Package java-11-amazon-corretto.x86.64 1:11.0.19+7-1.amzn2 will be installed

--> Processing Dependency: dejavu-sans-mono-fonts for package: 1:java-11-amazon-corretto-11.0.19+7-1.amzn2.x86.64

-> Processing Dependency: dejavu-sans-fonts for package: 1:java-11-amazon-corretto-11.0.19+7-1.amzn2.x86.64

-> Processing Dependency: dejavu-sans-fonts for package: 1:java-11-amazon-corretto-11.0.19+7-1.amzn2.x86.64

-> Processing Dependency: giflib for package: 1:java-11-amazon-corretto-11.0.19+7-1.amzn2.x86.64

-> Processing Dependency: giflib for package: 1:java-11-amazon-corretto-11.0.19+7-1.amzn2.x86.64

-> Processing Dependency: libXts for package: 1:java-11-amazon-corretto-11.0.19+7-1.amzn2.x86.64

-> Processing Dependency: libXts for package: 1:java-11-amazon-corretto-11.0.19+7-1.amzn2.x86.64

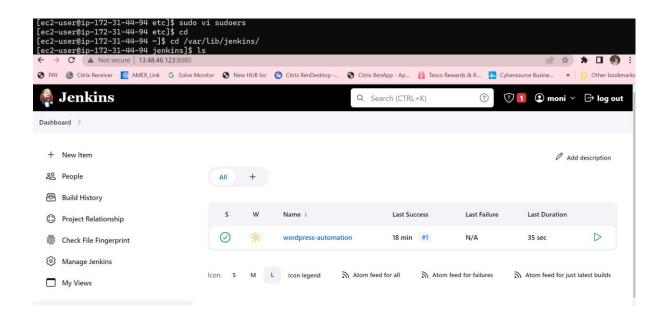
-> Processing Dependency: libXt for package: 1:java-11-amazon-corretto-11.0.19+7-1.amzn2.x86.64

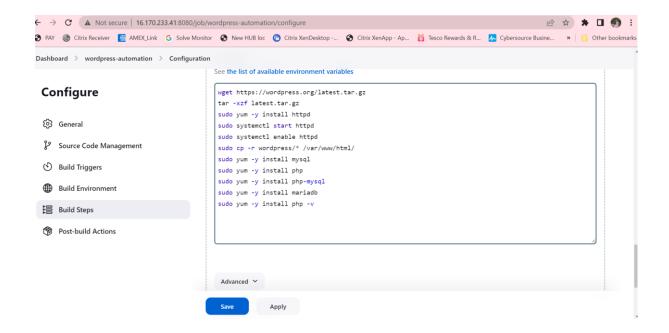
-> Package java-11-amazon-corretto-javadoc.x86.64 1:11.0.19+7-1.amzn2 will be installed

-> Package java-11-amazon-corretto-javadoc.x86.64 1:11.0.19+7-1.amzn2 will be installed

-> Pa
```

```
[ec2-user@ip-172-31-44-94 ~]$ sudo systemctl enable jenkins
Created symlink from /etc/systemd/system/multi-user.target.wants/jenkins.service to /usr/lib/systemd/system/jenkins.service.
[ec2-user@ip-172-31-44-94 ~]$ sudo systemctl start jenkins
[ec2-user@ip-172-31-44-94 ~]$ sudo cat /var/lib/jenkins/secrets/initialAdminPassword
05f7f079c56a4db98ff441acc02d51c3
| Gec2-user@ip-172-31-44-94 ~]$ cd /etc
| Gec2-user@ip-172-31-44-94 etc]$ cd www
| -bash: cd: www: No such file or directory
| Gec2-user@ip-172-31-44-94 etc]$ ls
                                                                    hostname
adjtime
                             DIR_COLORS
                                                                    hosts
                                                                                           motd
                                                                                                                        rc1.d
                                                                   hosts.allow
hosts.deny
idmapd.conf
                             DIR_COLORS.256color
DIR_COLORS.lightbgcolor
aliases
aliases.db
                                                                                                                                                     statetab
                                                                                            my.cnf
                                                                                                                         rc3.d
                                                                                           my.cnf.d
nanorc
                             dracut.conf
                                                                                                                        rc4.d
rc5.d
                                                                                                                                                    subgid
                                                                    image-id
                                                                   init.d
inittab
 anacrontab
                             e2fsck.conf
                                                                                            netconfig
                                                                                                                         rc6.d
                                                                                                                                                     sudo.conf
asound.conf
                                                                                                                                                    sudoers
at.denv
                             ethertypes
exports
                                                                    inputro
                                                                                           networks
                                                                                                                         rc.local
                                                                                            nfs.conf
                                                                                                                         request-key.conf
                                                                                                                                                    sudo-ldap.conf
                                                                    issue
                                                                                            nfsmount.conf
                                                                   issue.net
krb5.conf
                                                                                           nsswitch.conf
nsswitch.conf.bak
                                                                                                                         resolv.conf
                             filesystems
                                                                                                                                                     sysctl.conf
bashrc
                                                                                                                        rpc
                             fstab
                                                                    ld.so.cache
                                                                                                                         rsyncd.conf
                                                                                                                                                     system-release
                             GeoIP.conf
GeoIP.conf.default
                                                                                                                                                     system-release-cpe
chrony.conf
                                                                    ld.so.conf
                                                                                            os-release
                                                                                                                         rsyslog.conf
                                                                    libaudit.conf
 chrony.keys
                                                                                            passwd
                                                                                                                         rwtab
                             GREP_COLORS
                                                                                            passwd-
                                                                                                                                                     trusted-key.key
                                                                    libuser.conf
                                                                    locale.conf
                                                                                                                                                    updatedb.conf
                             group
                                                                    localtime
                             group-
grub2.cfg
                                                                                                                         screenro
 cron.deny
                                                                    login.defs
                                                                                                                         securetty
```







WordPress Website Loading via CI/CD Jenkins

