# Purpose

Implementation steps for a websever on ec2 instance that servers up wordpress sites using mysql RDS inside VPC.

# Steps

|  |  |  |  |
| --- | --- | --- | --- |
| Tasks | Properties | Values | Actions |
| Create one VPC | Name | wordPressVPC |  |
|  | Ip | 10.0.0.0/16 |  |
|  | Tenancy | Default |  |
|  |  |  |  |
| Create first subnets | Name | PublicSubnet |  |
|  | VPC | Select VPC that was created above from the drop down |  |
|  | Availability Zone | Select one from drop down |  |
|  | Ip | 10.0.1.0/24 |  |
|  |  |  |  |
| Create second subnets | Name | PrivateSubnet |  |
|  | VPC | Select VPC that was created above from the drop down |  |
|  | Availability Zone | Select one from drop down |  |
|  | ip | 10.0.2.0/24 |  |
|  |  |  |  |
| Create internet gateway | Name | wordpressIGW | Select wordpressIGW and attach to wordpressVPC |
| Adding route to route table |  |  | Select wordpressVPC route table, for routes create a route to 0.0.0.0/0 from wordpressIGW (internet gateway) |
| Adding subnet to routing table |  |  | Add PublicSubnet and save |
| Create new Network ACL | Name | PublicSubnetACL |  |
|  | VPC | wordpressVPC |  |
| Create NACL inbound rules |  |  | Add allow rule 100 for http, 200 for https and 300 for custom TCP/IP type with port range of 32768-65535. And source ip has 0.0.0.0/0 for all |
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| Attach subnet to NACL |  |  | Add PublicSubnet |
| Create Security group | Name | webServerSG |  |
|  | Group name | webServerSG |  |
|  | Description | webserver security group |  |
|  | Vpc | wordpressVPC |  |
| Webserver inbound rules |  |  | Allow ssh,http and https traffic from source ip 0.0.0.0/0 |
| Create Security group | Name | RDSSG |  |
|  | Group name | RDSSG |  |
|  | Description | RDS security group |  |
|  | Vpc | wordpressVPC |  |
| Webserver inbound rules |  |  | Allow mysql/Aurora traffic from source webserverSG security group |
| Create EC2 instance |  |  | Pick an linux AMI |
|  |  |  | Select t2.micro instance type |
| Configure EC2 | Network | wordpressVPC |  |
|  | Subnet | publicSubnet |  |
|  | Auto assign public if | Use subnet setting (enable) |  |
|  | Advanced details | #!/bin/bash  yum update -y  yum install httpd php php-mysql –y  cd /var/www/html  wget https://wordpress.org/latest.tar.gz  tar -xzf latest.tar.gz  cp -r wordpress/\* /var/www/html/  chmod -R 755 wp-content  chown -R apache:apache wp-content  service httpd start  chkconfig httpd on | Write a bash script to automate the install of apache, php & php-mysql, download wordpress.tar file, untar, copy wordpress dir to /var/www/html, change perissions and ownership and start apaches |
|  | Add tag | Name : webserver |  |
| Config security group |  |  | Select webserverSG group |
| Keypair |  |  | Generate and download and save |
| Create RDS – Mysql | Use case | Dev/test |  |
|  | DB Class | Db.t2.micro |  |
|  | Instance Identifier | Wordpress |  |
|  | Master username | Wordpress |  |
|  | Password | Wordpress |  |
|  | VPC | wordpressVPC |  |
|  | VPC security group | RDSSG | Launch DB  Copy the end point |
|  |  |  |  |

# Testing

|  |  |  |
| --- | --- | --- |
| Task | Actions | Results |
| Check webserver serving pages | Copy ec2 public ip and paste into the browser | Should show wordpress welcome page |
|  | Provide DBname, username, password and host (endpoint) | Wordpress admin page |

Configure Database by providing the information and provide the endpoint for the database host and submit