

Database Administration and Scaling

T4A Assignment Postgresql in the cloud, Getting Started

1. DB instance specifications in AWS console

Modify DB Instance: ss100

Instance specifications

DB engine version

Version number of the database engine to be used for this instance.

PostgreSQL 12.3-R1 (default)

DB instance class

Contains the compute and memory capacity of the DB instance.

db.t2.micro — 1 vCPU, 1 GiB RAM

Multi-AZ deployment

Specifies if the DB instance should have a standby deployed in another availability zone.

☐ Yes

☒ No

Storage type

General Purpose (SSD)

2. DB instance summary and connectivity settings

RDS > Databases > ss100

ss100

Modify

Actions ▼

Summary

DB identifier
ss100

CPU
3.50%

Info
Resetting-master-credentials

Class
db.t2.micro

Role
Instance

Current activity
0 Sessions

Engine
PostgreSQL

Region & AZ
us-east-1f

Connectivity & security

Monitoring

Logs & events

Configuration

Maintenance & backups

Tags

Connectivity & security

Endpoint & port

Networking

Security

Connectivity & security		
Endpoint & port	Networking	Security
Endpoint ss100.c2xlog7qhvlh.us-east-1.rds.amazonaws.com	Availability zone us-east-1f	VPC security groups default (sg-18397227) (active)
Port 5432	VPC vpc-1f778d62	Public accessibility Yes
	Subnet group default-vpc-1f778d62	Certificate authority rds-ca-2019
	Subnets subnet-4d1b7843 subnet-a6671eeb subnet-33823612 subnet-46d47e19 subnet-b30da3d5 subnet-372dd006	Certificate authority date Aug 22nd, 2024

3. AWS RDS Instance Security Policy Configuration (modified inbound rules)

New EC2 Experience
Tell us what you think

EC2 Dashboard New

Events New

Tags

Limits

▼ Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts New

Scheduled Instances

Capacity Reservations

▼ Images

sg-18397227 - default

Delete security groupCopy to new security group

Details

Security group name
default

Security group ID
sg-18397227

Description
default VPC security group

VPC ID
vpc-1f778d62

Owner
147246314876

Inbound rules count
1 Permission entry

Outbound rules count
1 Permission entry

Inbound rules

Outbound rules

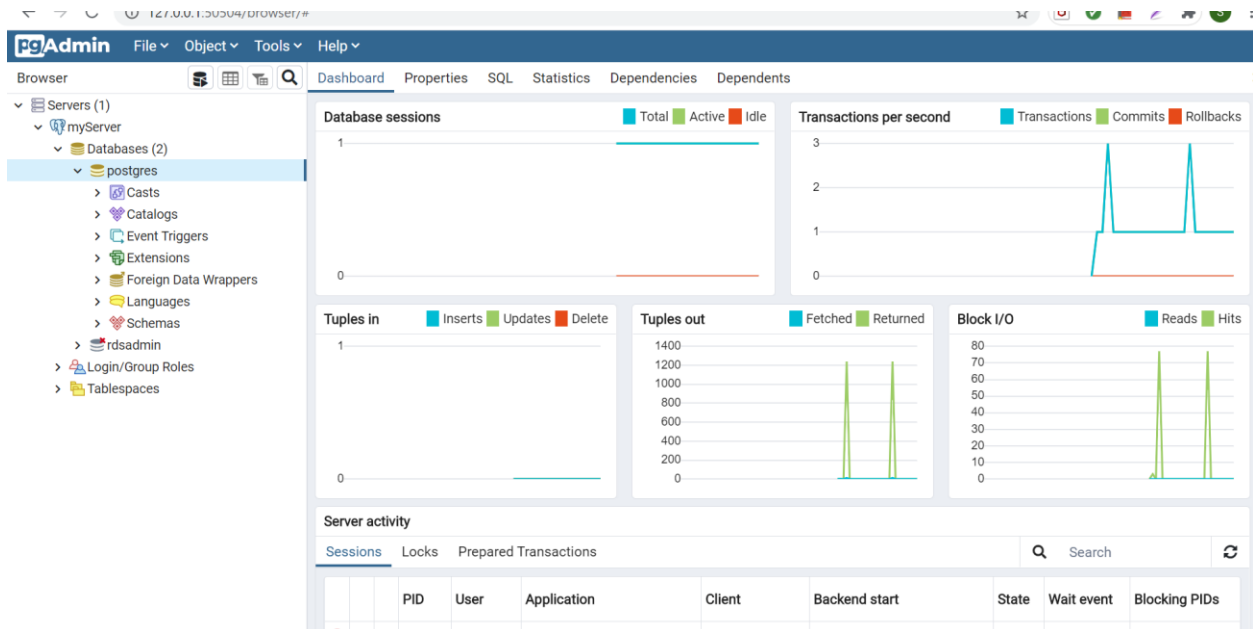
Tags

Inbound rules

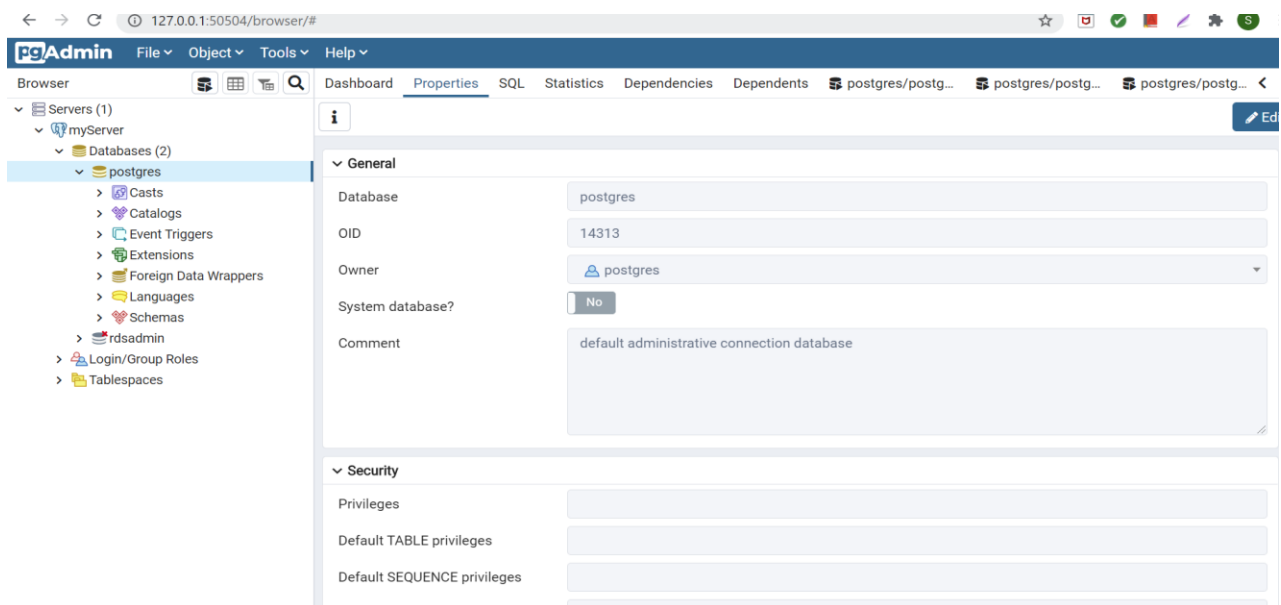
Edit inbound rules

Type	Protocol	Port range	Source	Description - optional
PostgreSQL	TCP	5432	76.191.22.184/32	-

4. Database connection successful using pgAdmin4



5. Properties of postgres database connection in pgAdmin4



▼ Definition

Encoding

UTF8

Tablespace

pg_default

Collation

en_US.UTF-8

Character type

en_US.UTF-8

Connection limit

-1

Template?

No

Allow connections?

Yes

▼ Advanced

6. Query to close connection to database in pgAdmin4 query editor; reconnecting to database using UIUC cisco VPN

9/27/2020 11:57:41 AM 6

Date Rows Affected

765 msec

Duration

Copy

Copy to Query Editor

SELECT pg_terminate_backend(**20104**)

