

Connection

```
psql -h <endpoint> -p 5439 -U <username> -d <database>
```

Connect to Redshift cluster using PostgreSQL client

```
aws redshift get-cluster-credentials --cluster-identifier <cluster-id> --db-user <username>
```

Get temporary credentials for authentication

JDBC Connection String

```
jdbc:redshift://<endpoint>:5439/<database>
```

Database Administration

```
CREATE USER username PASSWORD 'password';
```

Create a new user

```
DROP USER username;
```

Remove a user

```
GRANT permission ON object TO username;
```

Grant permissions

```
REVOKE permission ON object FROM username;
```

Revoke permissions

```
CREATE DATABASE dbname;
```

Create a new database

```
DROP DATABASE dbname;
```

Delete a database

Monitoring

```
SELECT * FROM stv_sessions;
```

View current sessions

```
SELECT * FROM stv_inflight;
```

View currently running queries

```
SELECT * FROM svv_table_info;
```

View table metadata and statistics

```
SELECT * FROM stl_query;
```

View query history

```
SELECT * FROM stl_alert_event_log;
```

View system alerts

```
SELECT * FROM svl_query_summary;
```

View query performance summary

Performance Optimization

```
VACUUM [FULL] [table_name];
```

Reclaim space and resort rows

```
ANALYZE [table_name];
```

Update statistics for query optimizer

```
EXPLAIN SELECT * FROM table;
```

Show query execution plan

```
SELECT * FROM svv_table_info ORDER BY unsorted DESC;
```

Find tables that need VACUUM

```
SELECT * FROM stl_alert_event_log WHERE event LIKE '%Disk%';
```

Check for disk space alerts

Data Loading

```
COPY table FROM 's3://bucket/path' IAM_ROLE 'arn:aws:iam::account-id:role/role-name';
```

Load data from S3

```
COPY table FROM 's3://bucket/path' IAM_ROLE 'arn:aws:iam::account-id:role/role-name' DELIMITER ',' IGNOREHEADER 1;
```

Load CSV data with header

```
COPY table FROM 's3://bucket/path' IAM_ROLE 'arn:aws:iam::account-id:role/role-name' JSON 'auto';
```

Load JSON formatted data

```
UNLOAD (SELECT * FROM table) TO 's3://bucket/path' IAM_ROLE 'arn:aws:iam::account-id:role/role-name';
```

Export data to S3

System Tables/Views

```
SELECT * FROM pg_table_def;
```

View table definitions

```
SELECT * FROM stv_blocklist;
```

View data block distribution

```
SELECT * FROM pg_database;
```

List all databases

```
SELECT * FROM pg_user;
```

List all users

```
SELECT * FROM stv_tbl_perm;
```

View permanent tables

Maintenance

```
ALTER TABLE table_name ADD COLUMN column_name datatype;
```

Add a column to a table

```
ALTER TABLE table_name DROP COLUMN column_name;
```

Drop a column from a table

```
TRUNCATE table_name;
```

Delete all rows from a table

```
ALTER TABLE table_name RENAME TO new_table_name;
```

Rename a table

```
SELECT PG_GET_LATE_BINDING_VIEW_COLS() COLS FROM pg_get_late_binding_view_cols() COLS;
```

View late binding view columns