Salesforce - Heroku Postgres - Redshift
Bi-Directional Data Sync

Business requires data that is stored in Redshift to be integrated into the Salesforce Application.   In addition, data that is part of Salesforce is needed in the Redshift Database as well as in an S3 format.   This bi-directional data sync solution provides this capability through a declarative approach vs coding.

1

3

2

Private Space

b

Heroku Connect

oAuth

TLS 1.2   TLS 1.2

a

a

Private Postgres DB SSL

b

Whitelist 35.160.163.106

c

VPC

Elastic IP 35.160.163.106

b

NAT Gateway

VPC Public subnet

a

IAM

VPC Private subnet

c

AWS Glue

Amazon Redshift
Security Group

virtual private cloud

1

a. Salesforce data is bi-directionally synced via Heroku Connect to a Heroku Postgres DB via HTTPS TLS 1.2

b. Heroku Connect authenticates via oAuth.   Salesforce user profile controls access to objects and fields

3

a. Heroku Postgres database is private within a Private Space (VPC) and requires SSL authentication.

b. Connection via AWS Glue into the Heroku Postgres DB is via a trusted IP entry point which is completely within the AWS network

c. Connection is within the same region and is encrypted.

2

a. AWS Glue leverages an IAM Role to access Redshift.   Private Subnet points all traffic to NAT Gateway.

b. Database servers can connect to the Internet for software updates using the NAT gateway, but the Internet cannot establish connections to the database servers.

c. Security Group for Redshift is self-referencing and Private Subnet is used to send traffic through the NAT Gateway

AWS Region