

DBT - Key Pair Authentication

DBT & Snowflake Integration – Key Pair

Creation of private and public keys for DBT & Snowflake Integration

CREATE PASSPHRASE

- Create Passphrase and store it in Google secret manger.
- Open terminal window and type the below command to create private key with new passphrase

```
openssl genrsa 2048 | openssl pkcs8 -topk8 -v2 des3 -inform PEM -out hrdp_snowfake_key_dv.p8
```

- After creation of private key, run the below command to create public key

```
openssl rsa -in hrdp_snowfake_key_dv.p8 -pubout -out hrdp_snowfake_key_dv.pub
```

CREATE USERS IN SNOWFLAKE

- Create users in Snowflake regions (this is one time activity)

```
CREATE USER HRDP_DBT_DV PASSWORD='abc123'
```

```
DEFAULT_ROLE = HRDP_DV_DOMAIN_ADMIN
```

```
LOGIN_NAME = HRDP_DBT_DV
```

```
DEFAULT_WAREHOUSE = HRDP_DBT_BASE_WH;
```

- Grant role to user & Unset password.

```
grant role HRDP_DV_DOMAIN_ADMIN TO USER HRDP_DBT_DV;
```

```
ALTER USER HRDP_DBT_DV UNSET PASSWORD;
```

- Then run the below command to set the public key in snowflake.

```
ALTER USER HRDP_DBT_DV SET RSA_PUBLIC_KEY='ENTER PUBLIC KEY HERE';
```

DBT Deployment credentials:

Go to deploy then environments. Select the respective region and click edit for the deployment credentials. Then paste the private key in the tab with the passphrase.

The screenshot shows the dbt Cloud interface for configuring a deployment connection. The top navigation bar includes 'Develop', 'Deploy', and 'Documentation'. The current page is 'Deployment Connection' for the environment 'NP_R'. A dropdown menu is open under 'Deploy', showing options: 'Run History', 'Jobs', 'Environments', and 'Data Sources'. The 'Only run' checkbox is checked. The 'Custom Branch' is set to 'np'. The 'Deployment Connection' section includes fields for 'Account' (bo26422.europe-west4.gcp), 'Role' (HRDP_NP_DOMAIN_ADMIN), 'Auth Method' (Key Pair), 'Username' (SF_DBT_NP_SA), 'Private Key' (masked with dots), 'Private Key Passphrase' (masked with dots), and 'Schema' (CMN_LND_SCH). A note states: 'Override connection settings for this environment, only certain fields are able to be overridden.' and 'Supply the passphrase for the private key if required - Note: private keys must be encrypted'.

DV username: HRDP_DBT_DV

QA username: HRDP_DBT_QA

NP username: HRDP_DBT_NP

PD username: HRDP_DBP_PD

In the private key tab, copy the respective region private encrypted key mentioned above with the commented line included.

Passphrase tab : place the above mentioned value for the respective regions.

Note: The above statements are one time process which is already done. By any chance if you created, we have to follow the same steps in snowflake and DBT which will required some amount of time. So please don't create it once again. If you feel you have to create a new private key in such scenarios also, we can create based on our existing public key.

The actual public key, private and passphrase key is placed in the secret manager. Please get in touch with the respective person to access the same.

DV Secret Manager:

itg-hranalytics-gbl-ww-dv

secret

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QA Secret Manager:

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Secret Manager

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Secret Manager lets you store, manage, and secure access to your application secrets.

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