

Snowflake OAuth login

In order to make the connections between Alteryx and Snowflake even more secure we would like to have the possibility to connect to snowflake with OAuth in an easier way.

The connections to snowflake via OAuth are very similar to the connections Alteryx already does with O365 applications. It requires:

- Tenant URL
- Client ID
- Client Secret

1. Get Authorization token provided by the snowflake authorization endpoint.
 - a. **Ex:**
https://mysnowflake.eu-west-1.snowflakecomputing.com/oauth/authorize?client_id=MyClientID&response_type=code&redirect_uri=http%3A%2F%2Flocalhost%2F
2. Give access consent (a browser popup will appear)
3. With the Authorization Code, the client ID and the Client Secret make a call to retrieve the Refresh Token and TTL information for the tokens
 - a. **Ex:**

```
curl -X POST -H "Content-Type: application/x-www-form-urlencoded;charset=UTF-8" --user "MyClientID:MyClientSecret" --data-urlencode "grant_type=authorization_code" --data-urlencode "code=MyAuthorizationCode" --data-urlencode "redirect_uri=http://localhost/" "https://mysnowflake.eu-west-1.snowflakecomputing.com/oauth/token-request"
```
4. Get the Access Token every time it expires
 - a. **Ex:**

```
curl -X POST -H "Content-Type: application/x-www-form-urlencoded;charset=UTF-8" --user user "MyClientID:MyClientSecret" --data-urlencode "grant_type=refresh_token" --data-urlencode "refresh_token=MyRefreshToken" --data-urlencode "redirect_uri=http://localhost/" "https://mysnowflake.eu-west-1.snowflakecomputing.com/oauth/token-request"
```

With this an automated workflow using OAuth between Alteryx and Snowflake will be possible.

You can find here some URL's that helped me follow this through:

<https://docs.snowflake.com/en/user-guide/odbc-parameters.html#additional-connection-parameters>

<https://community.snowflake.com/s/article/HOW-TO-OAUTH-TOKEN-GENERATION-USING-SNOWFLAKE-CUSTOM-OAUTH>