Complete Guide about GOOGLE drive API

Step 1: Setup in Google Cloud Console
1. Go to console.cloud.google.com
2. Create a new project (or use an existing one)
3. Navigate to:
APIs & Services ? Credentials
4. Click Create Credentials ? OAuth client ID
o Choose Web application
o Set Authorized redirect URI to:

http://localhost:8081/oauth2/callback/google
5. Save your:
o ? client_id
o ? client_secret

Step 2: Configure OAuth Consent Screen
1. Go to:
APIs & Services ? OAuth consent screen
2. Set User type to External
3. Add your Gmail to Test Users
4. Save

Step 3: Get Authorization Code (in Browser)
Open this URL in your browser (replace line breaks with one line):

https://accounts.google.com/o/oauth2/v2/auth?
client_id=YOUR_CLIENT_ID
&redirect_uri=http://localhost:8081/oauth2/callback/google
&response_type=code
&scope=https://www.googleapis.com/auth/drive
&access_type=offline
&prompt=consent

? Log in ? Click "Allow"
You'll be redirected to:

http://localhost:8081/oauth2/callback/google?code=ABC123...
Use code strart from ABC to before &
and use in nest step

Step 4: Exchange Code for Access + Refresh Token (in Postman)
1. Create a POST request to:

https://oauth2.googleapis.com/token
2. Body ? x-www-form-urlencoded:
KeyValueclient_idyour client IDclient_secretyour client secretcodethe code from
URLgrant_typeauthorization_coderedirect_urihttp://localhost:8081/oauth2/callback/go
ogle? Response will include:
* access_token ?
* refresh_token ?

?? Step 5: Reuse Refresh Token to Get New Access Token (Later)
POST to:

https://oauth2.googleapis.com/token
Body (x-www-form-urlencoded):

KeyValueclient_idyour client IDclient_secretyour client secretrefresh_tokensaved refresh tokengrant_typerefresh_token? This gives you a fresh access_token every time (valid 1 hour)

BELOW ARE THE ORIGINAL TOKENS I GET AFTER DOING ABOVE STEPS

I used msrl4gcloud@gmail.com for all

Client ID
737784796770-nlsceksi77cv3p8saknekkpc4b1d7f8a.apps.googleusercontent.com
Client Secret
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

Generate a New Authorization Code
https://accounts.google.com/o/oauth2/v2/auth?
client_id=737784796770-nlsceksi77cv3p8saknekkpc4b1d7f8a.apps.googleusercontent.com
&redirect_uri=http://localhost:8081/oauth2/callback/google
&response_type=code
&scope=https://www.googleapis.com/auth/drive
&access_type=offline
&prompt=consent

GOOGLE DRIVE TOKENS(this is output after tokens generation)(include the code came from above link):

```
{
    "access_token":
"ya29.a0AS3H6NzFLt5jIt3c9IhdjSsEUlkKJ6FCHow9c5BhFfIVK88ET7eamqDEHZ3ygTQ6peeSe8ZFWDA
GXh-8aV_IsM3CCE6Rtqgjs7_5I61ojZwxcf777ADYvi-t4F5vSN4SAJ1JE9jaFT-
2Zd9kmQVUu9TfFfUFaHnhfMzcJxLdaCgYKAccSARYSFQHGX2MiOHRyD33_bsvteq11ZTwvBw0175",
    "expires_in": 3599,
    "refresh_token": "1//0g-oZu8IGp1VsCgYIARAAGBASNwF-
L9Irtu9OtVbkRqGXVMF52dzfZIe1OIwD_7HghrbqNrnJV-vNT-2ZZvLUGLpYh_0w3HBLPjk",
    "scope": "https://www.googleapis.com/auth/drive",
    "token_type": "Bearer",
    "refresh_token_expires_in": 604799
}
```

Newly refereshed access token(Valid Only 1hr from generation)

"a0AS3H6NzhvwLeDFoFmQ6mor_5D-
QSJh_zMDSfU9okj3HMVgp7mewKiidBgRFw8g7R13BG67_9KS7AdToXfbiWiI8vgVa1pbokcK3ZRsvv3KFiE
ofjyA4Hm0HOJXt2KYw9iApdn1CREuadP8nzm0IOTx6fhVPhQYhxKmDCnm6CaCgYKAbASARYSFQHGX2MiK_V
2vzGh72Pz5aDtkZ3c-Q0175"

COMPLETE GUIDE TO GET ONE DRIVE APIS

Step 1. App Registration (Azure Portal)
* Go to portal.azure.com
* Navigate to:
Azure Active Directory ? App registrations ? New registration
* Fill:
o Name: CloudFlex OneDrive App
o Redirect URI:
http://localhost:8081/onedrive/callback

* Click Register
* Copy:
o Client ID
o Tenant ID

Step 2. Create Client Secret
* Go to: Certificates & Secrets ? New client secret
* Add a description ? copy the secret value

Step 3. Set Required API Permissions
* API Permissions ? Microsoft Graph ? Delegated permissions
o ? Files.ReadWrite.All
o ? offline_access
o ? User.Read
* Click "Grant admin consent"

Step 4. Get Authorization Code (User Login)
* Open this URL in browser:

https://login.microsoftonline.com/common/oauth2/v2.0/authorize?
client_id=YOUR_CLIENT_ID
&response_type=code
&redirect_uri=http://localhost:8081/onedrive/callback
&scope=Files.ReadWrite.All offline_access User.Read
&response_mode=query
* After login, copy the code from:

http://localhost:8081/onedrive/callback?code=XYZ...

Step 5. Exchange Code for Tokens (Postman)
POST to:

https://login.microsoftonline.com/common/oauth2/v2.0/token
Body (x-www-form-urlencoded):
KeyValueclient_id(from Azure)client_secret(generated secret)code(from Step
4)grant_typeauthorization_coderedirect_urihttp://localhost:8081/onedrive/callbacksc
opeFiles.ReadWrite.All offline_access User.Read? Response:
* access_token (valid for 1 hour)
* refresh_token (valid ~90 days)

Step 6. Use Access Token for OneDrive API
GET List files:
https://graph.microsoft.com/v1.0/me/drive/root/children
Header:
Authorization: Bearer YOUR_ACCESS_TOKEN

Step 7. Refresh Expired Access Token (Postman)
POST to:

https://login.microsoftonline.com/common/oauth2/v2.0/token
Body:
KeyValueclient_idyour app client IDclient_secretyour app secretrefresh_tokensaved
refresh tokengrant_typerefresh_tokenscopeFiles.ReadWrite.All offline_access
User.Read

BELOW ARE THE ORIGINAL TOKENS I GET AFTER DOING ABOVE STEPS

AZURE

```
application id(Client ID): 5be256cc-2696-4203-8300-5ad641f0dc55 //used as Client ID
Object Id:    598f0bf3-61b0-4602-918e-5133f83da176
Directory Email ID:    377383c2-3be0-4e01-b2c8-8526d5e58adb


CloudFlexSecret:
   Value :    1wg8Q~cgA3wvkskassWYNKoCvgZSOL9~9I7puaUq    //Used as Client Secret
   Secret Id : 0d3213f0-627f-47ea-a590-c1de5ad296e6


https://login.microsoftonline.com/common/oauth2/v2.0/authorize?%20client_id=5be256c
c-2696-4203-8300-
5ad641f0dc55%20&response_type=code%20&redirect_uri=http://localhost:8081/onedrive/c
allback%20&response_mode=query%20&scope=Files.ReadWrite.All%20offline_access%20User
.Read


{
    "token_type": "Bearer",
    "scope": "Files.ReadWrite.All User.Read profile openid email",
    "expires_in": 5005,
    "ext_expires_in": 5005,
    "access_token":
```

```
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```

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VcA2f2dgh1arzFxDmucJOBWASBWfCOEOg"
}

Newly generated access token(valid 1 hr only)
valid
"eyJ0eXAiOiJKV1QiLCJub25jZSI6Ilc0TW1VR3M3R0k1SFZYakZOMlRPRnd2X3pVYnZqRy1HaTlFLUktQ2
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