How to use rclone to mount OneDrive share in Ubuntu

General documentation

- https://pegasus.vumc.org/ViewKnowledge.aspx?id=15297
- https://itsfoss.com/use-onedrive-linux-rclone/

If rclone is not already installed, download .deb installer and install

Download

```
$ https://downloads.rclone.org/v1.58.1/rclone-v1.58.1-linux-amd64.deb
```

Install

```
$ sudo dpkg -i ~/Download/rclone-v1.58.1-linux-amd64.deb
```

Make a mount point for the OneDrive share. This can be any name you like, but if you use something different, make appropriate changes later in this script.

```
$ mkdir ~/OneDrive
```

Configure rclone. This is a complete terminal session and all of the input and output is shown. The user's input is in **red**.

```
$ rclone config
```

```
No remotes found, make a new one?
n) New remote
s) Set configuration password
q) Quit config
n/s/q> n
name > remote_vumc
Option Storage.
Type of storage to configure.
Choose a number from below, or type in your own value.
 1 / 1Fichier
   \ (fichier)
 2 / Akamai NetStorage
   \ (netstorage)
 3 / Alias for an existing remote
   \ (alias)
 4 / Amazon Drive
   \ (amazon cloud drive)
```

```
5 / Amazon S3 Compliant Storage Providers including AWS, Alibaba, Ceph, China
Mobile, Digital Ocean, Dreamhost, IBM COS, Lyve Cloud, Minio, Netease,
RackCorp, Scaleway, SeaweedFS, StackPath, Storj, Tencent COS and Wasabi
   \ (s3)
 6 / Backblaze B2
   \ (b2)
 7 / Better checksums for other remotes
   \ (hasher)
 8 / Box
   \ (box)
 9 / Cache a remote
   \ (cache)
10 / Citrix Sharefile
   \ (sharefile)
11 / Compress a remote
   \ (compress)
12 / Dropbox
   \ (dropbox)
13 / Encrypt/Decrypt a remote
   \ (crypt)
14 / Enterprise File Fabric
   \ (filefabric)
15 / FTP Connection
   \ (ftp)
16 / Google Cloud Storage (this is not Google Drive)
   \ (google cloud storage)
17 / Google Drive
  \ (drive)
18 / Google Photos
   \ (google photos)
19 / Hadoop distributed file system
   \ (hdfs)
20 / Hubic
   \ (hubic)
21 / In memory object storage system.
   \ (memory)
22 / Jottacloud
   \ (jottacloud)
23 / Koofr, Digi Storage and other Koofr-compatible storage providers
   \ (koofr)
24 / Local Disk
   \ (local)
```

```
25 / Mail.ru Cloud
   \ (mailru)
26 / Mega
   \ (mega)
27 / Microsoft Azure Blob Storage
   \ (azureblob)
28 / Microsoft OneDrive
   \ (onedrive)
29 / OpenDrive
   \ (opendrive)
30 / OpenStack Swift (Rackspace Cloud Files, Memset Memstore, OVH)
   \ (swift)
31 / Pcloud
   \ (pcloud)
32 / Put.io
   \ (putio)
33 / QingCloud Object Storage
   \ (qingstor)
34 / SSH/SFTP Connection
  \ (sftp)
35 / Sia Decentralized Cloud
   \ (sia)
36 / Storj Decentralized Cloud Storage
   \ (storj)
37 / Sugarsync
   \ (sugarsync)
38 / Transparently chunk/split large files
   \ (chunker)
39 / Union merges the contents of several upstream fs
  \ (union)
40 / Uptobox
   \ (uptobox)
41 / Webdav
   \ (webdav)
42 / Yandex Disk
   \ (yandex)
43 / Zoho
   \ (zoho)
44 / http Connection
   \ (http)
45 / premiumize.me
   \ (premiumizeme)
```

```
46 / seafile
   \ (seafile)
Storage> onedrive
Option client_id.
OAuth Client Id.
Leave blank normally.
Enter a value. Press Enter to leave empty.
client id>
Option client secret.
OAuth Client Secret.
Leave blank normally.
Enter a value. Press Enter to leave empty.
client_secret>
Option region.
Choose national cloud region for OneDrive.
Choose a number from below, or type in your own string value.
Press Enter for the default (global).
 1 / Microsoft Cloud Global
   \ (global)
 2 / Microsoft Cloud for US Government
   \ (us)
 3 / Microsoft Cloud Germany
 4 / Azure and Office 365 operated by 21Vianet in China
   \ (cn)
region> global
Edit advanced config?
y) Yes
n) No (default)
y/n > n
Use auto config?
 * Say Y if not sure
 * Say N if you are working on a remote or headless machine
y) Yes (default)
n) No
y/n>y
2022/06/27 13:52:14 NOTICE: If your browser doesn't open automatically go to
the following link: http://127.0.0.1:53682/auth?state=eU6tgGOGfApvrdlZWvWGxQ
2022/06/27 13:52:14 NOTICE: Log in and authorize rclone for access
2022/06/27 13:52:14 NOTICE: Waiting for code...
2022/06/27 13:52:16 NOTICE: Got code
```

```
Option config_type.
Type of connection
Choose a number from below, or type in an existing string value.
Press Enter for the default (onedrive).
 1 / OneDrive Personal or Business
   \ (onedrive)
 2 / Root Sharepoint site
   \ (sharepoint)
   / Sharepoint site name or URL
 3 | E.g. mysite or https://contoso.sharepoint.com/sites/mysite
   \ (url)
 4 / Search for a Sharepoint site
   \ (search)
 5 / Type in driveID (advanced)
   \ (driveid)
 6 / Type in SiteID (advanced)
   \ (siteid)
   / Sharepoint server-relative path (advanced)
 7 | E.g. /teams/hr
   \ (path)
config_type> onedrive
Drive OK?
Found drive "root" of type "business"
URL: https://vumc365-my.sharepoint.com/personal/dale_plummer_vumc_org/Documents
y) Yes (default)
n) No
y/n> y
[remote vumc]
type = onedrive
token =
{"access_token":"eyJ0eXAiOiJKV1QiLCJub25jZSI6ImVFM3E0Q0wzbXI2SDR5eUs4S2tmMXZrVm
pvY3dZbUc5alVjRW50RFQzY2MiLCJhbGciOiJSUzI1NiIsIng1dCI6IjJaUXBKM1VwYmpBWVhZR2FYR
UpsOGxWMFRPSSIsImtpZCI6IjJaUXBKM1VwYmpBWVhZR2FYRUpsOGxWMFRPSSJ9.eyJhdWQi0iIwMDA
wMDAwMyOwMDAwLTAwMDAtYzAwMCOwMDAwMDAwMDAwMDAilCJpc3MiOiJodHRwczovL3NOcy53aW5kb3
dzLm5ldC9lZjU3NTAzMC0xNDIOLTRlZDgtYjgzYy0xMmM1MzNkODc5YWIvIiwiaWF0IjoxNjU2MzU1N
jM2LCJuYmYiOjE2NTYzNTU2MzYsImV4cCI6MTY1NjM2MTA4MSwiYWNjdCI6MCwiYWNyIjoiMSIsImFp
by161kUyWmdZREQ1SGpmUld1UEZpVWxKQjJvUGNQOUsyL2ZNTDBycmdRSmJ2Tm4wajdXUGd5MEIiLCJ
hbXIiOlsicHdkIlOsImFwcF9kaXNwbGF5bmFtZSI6InJjbG9uZSIsImFwcGlkIjoiYjE1NjY1ZDktZW
```

RhNiOOMDkyLTg1MzktMGV1YzM3NmFmZDU51iwiYXBwaWRhY31iOi1x1iwiZmFtaWx5X25hbWUiOiJQb

HVtbWVyIiwiZ212ZW5fbmFtZSI6IldhbHRvbiIsImlkdHlwIjoidXNlciIsImlwYWRkciI6IjE2MC4x MjkuMjUwLjIzNiIsIm5hbWUiOiJQbHVtbWVyLCBEYWxlIiwib2lkIjoiZDQxYjA3MzUtZjk5MyOONDF iLTg4Y2ItMjJmNzY4Y2Z1MTA1Iiwib25wcmVtX3NpZCI6I1MtMSO1LTIxLTI5MDA50Dc3MzAtMTcwNj U3Mzg4Ny0zMjc5NTkyNTk1LTcwMDciLCJwbGF0ZiI6IjgiLCJwdWlkIjoiMTAwMzNGRkY5REY4MUYwQ SIsInJoIjoiMC5BVkVBTUZCWDd5UVUyRTY0UEJMRk05aDVxd01BQUFBQUFBQUFBQUFBQUFBQUFBQ1JB STguIiwic2NwIjoiRmlsZXMuUmVhZCBGaWxlcy5SZWFkLkFsbCBGaWxlcy5SZWFkV3JpdGUgRmlsZXM uUmVhZFdyaXR1LkFsbCBTaXR1cy5SZWFkLkFsbCBwcm9maWx1IG9wZW5pZCB1bWFpbCIsInNpZ25pb1 9zdGF0ZSI6WyJpbmtub3dubnR3ayIsImttc2kiXSwic3ViIjoiRllBY3ZIenhzTTJIbFJYYldDeURYY 3BEQ2hrQnYwajJvNkh0czFv0TRZbyIsInRlbmFudF9yZWdpb25fc2NvcGUi0iJ0QSIsInRpZCI6ImVm NTc1MDMwLTE0MjQtNGVkOC1iODNjLTEyYzUzM2Q4NzlhYiIsInVuaXF1ZV9uYW11IjoiZGFsZS5wbHV tbWVyQHZ1bWMub3JnIiwidXBuIjoiZGFsZS5wbHVtbWVyQHZ1bWMub3JnIiwidXRpIjoiVHVGdGEtQn VYMHlySWRDVORuSEFBQSIsInZlciI6IjEuMCIsIndpZHMiOlsiYjc5ZmJmNGQtM2VmOSOONjg5LTgxN DMtNzZiMTk0ZTg1NTA5Il0sInhtc19zdCI6eyJzdWIi0iIwV2d0MHNKZjBnd2pzQzR1R0taeWwtTmRq UnZ4TG9DQjZUTDFtb1FZbkQ0InOsInhtc190Y2R0IjoxNDY30TkyMzcwfQ.nDY8kWKEUXkW9gR9jeAG T2CbZ4MV1VvP9oJmhXV5jypPhFmk37rk71ue_IHEwaDA70ggdF17HCTc8Y19tH5UMteUuT8mtde3_hn dtfQyi9o80ZhvUgSHzOpg3cG0JWG7tbGJyyXfRB8fss6a7JFDh927_I18Bg9VncNQley5UsfowHUv-DB577GI6-

yiw0EceH6ZynSPIsAEzHxfGb_5FtU1kVSYEgcJ57c29aLH6Ja00xafz2Tee_x_0PG7uwBgj1LMUgDW2ZnhIfYVJj4CNWHLS-

1T9gAIRZdTE8Fqi1SnRUNG5ssxxoKyxgNUoplvMLW8xGVgQCuWn8BEyccVhQ","token_type":"Bearer","refresh_token":"0.AVEAMFBX7yQU2E64PBLFM9h5q911VrGm7ZJAhTk07Ddq_V1RAI8.AgABAEAAAD--

 $\label{lem:decomposition} DLA3V07QrddgJg7WevrAgDs_wQA9P99eT25jJn_AeheS7HTSOzJsIkBlfQG09uKMPcTRuaPaDva9_Pq_drLe8ErAEyCSs-hITij14ZbR_cnj6h_IBFUP-30X19oTXHvZukUbvI-$

 $\verb|qBiEneguKqHmNjkXtCGfLdMI18bnVLwZ-|\\$

OI__3pRwVYpLb6trTosdlo5NZoexJgu7lxFZHl__ACR2N9imv6af8DfTNEHIOXqfcP3mCDDgTL1eepIob7XXY74ojLP8Pvl8yL2vsguhG3f2xX1vjBLs2LsTFx_Npx_Vgj9gsx9kziPpDktYFZlG4SAQQX5HrbQAIefz6vZfRa58ylF1sv3L-

 $\label{loshdoymi7} w K1R76 wm F1ZloShdOymi7 ra KZS1fCjFfsryv WFL2nEOLg_7 rai3lUlbCcWJPB2qt42lKFFIsOfm9AJk 49PqSDggSmRuopzvvJ90VkPOacnWwoCSDHr5Rt8ExZAcNtUitYNjKKLlBN6lhSvg8SROeqVdP12F_MF 4K8QKscsYcyugU45uqzYwet5pd4ECg7NdOOizerq8qVApOXlMR3JZOACOy3uQW6D30EijRjmMr_WKf-qZkSh5j7-SRxpoQE1zYJ1WdMZ - \\$

gSvPJSyP_He28osiTLImM2bZtpjbWp8505j6nitXiXAbR7aa1DScYTSKs6HB2pQ3VTz1LvYD_LR8ACMbaVlhJ6ANdaoluX82hkYvp6LojRnJLjbn9bNVmlzxUdRtiPCrx2T0RxeM3yqpSkQmcMqfAzfxy9-BjX2KNACYm804YRludc6SXsESTyWxzxiKT7e874m8ptWP8","expiry":"2022-06-

27T15:18:01.081049274-05:00"}

drive_id = b!rQ1BSNglrESx0BaL30I3E1RVRMOSKdNAqX_mwl1pxTNxgi1ynclWRr7DSfS1He2D
drive_type = business

- e) Edit this remote
- d) Delete this remote

y) Yes this is OK (default)

y/e/d> y

Current remotes:

remote_vumc onedrive

- e) Edit existing remote
- n) New remote
- d) Delete remote
- r) Rename remote
- c) Copy remote
- s) Set configuration password
- q) Quit config
 e/n/d/r/c/s/q> q

Map the OneDrive share

\$ /usr/bin/rclone --vfs-cache-mode writes mount remote_vumc: ~/OneDrive/ &

See if it worked

\$ ls -la OneDrive/

This mount will remain actice as long as you keep this terminal running. If you'd like to mount the share when the system is booted, add this command to your crontab. This is all one line.

#@reboot (/usr/bin/rclone --vfs-cache-mode writes mount remote_vumc:
~/OneDrive/ &)&