

TECHNICAL REFERENCE GUIDE

Setting up a Google Service Account



EXECUTIVE SUMMARY

This *White Paper* provides details how to set up a **Google Service Account** in order to migrate multiple user mailboxes TO & FROM G Suite / Gmail in batch mode, without needing to rely on end-user passwords.

Need more help?

If you can't find the information you seek, please view the Help File, which contains the most detailed information about every feature within the tool, including additional best practices.

Please also contact us directly to get answers to your questions, as well as inform us of what's missing in this White Paper – we're always looking for ways to improve our offering, and documentation is an important piece of the puzzle.

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Section 1: Overview

There are two methods to migrate email to and from G Suite/Gmail in batch mode. Transend Migrator can connect to the Google message store via both the Google API (recommended) and IMAP.

In Transend Migrator, you have the following options in the Source and Target dropdown windows:

- Gmail IMAP (service account) – uses IMAP to migrate email data
- G Suite/Google Apps (service account) – uses Google API to migrate Email, Calendars, Contacts and Tasks.

Note: IMAP supports migrating email data only, and does not support migrating Calendars, Contacts and Tasks

The below steps detail how to create and enable a service account and a Google project in order to grant access to your Google APIs to migrate user data via the service account.

Section 2: Create a Service Account in Google Developers Console

Recommended: Use the Google Chrome web browser to create the Google Service Account. Some configuration options do not display in Internet Explorer or Firefox.

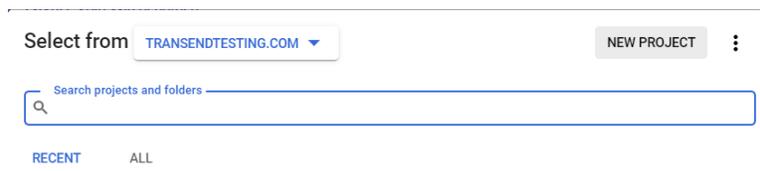
You will be given a service account email address and client id which you should note, and be able to download a private key file P12 format ("Google-privatekey.p12") which you should store in a secure location.

1. Login to the [Google Developers Console](#)

2. Click Create Project

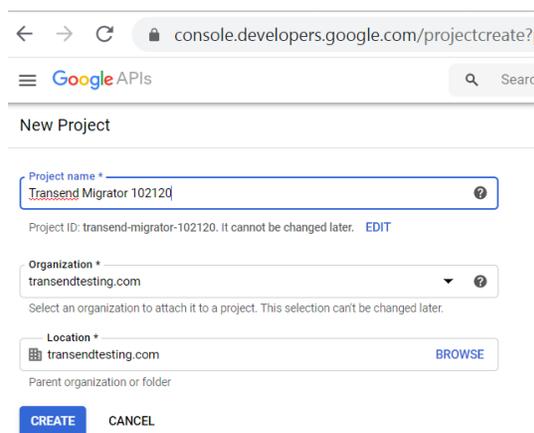


3. If you have existing projects, create a **New Project**

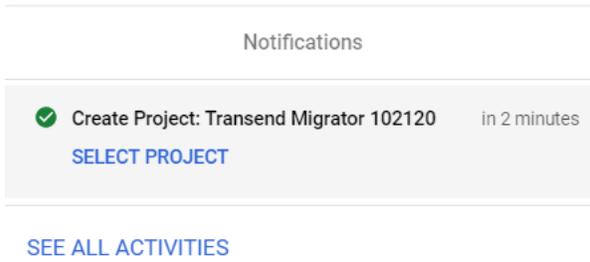


4. Enter the Project name: Transend Migrator

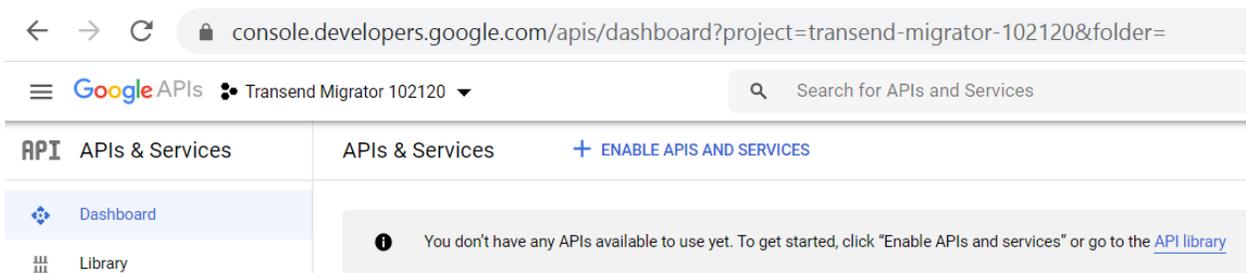
5. Click **Create**



6. Click **SELECT PROJECT**

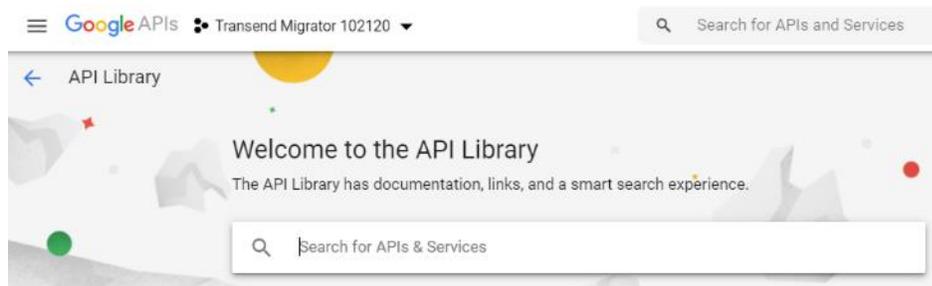


7. Click **API library** link or click **Library** on the side navigator.

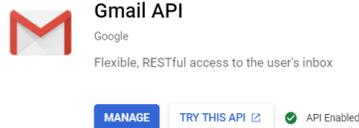


Enable Google API's

Search and enable the following APIs in the API Library:

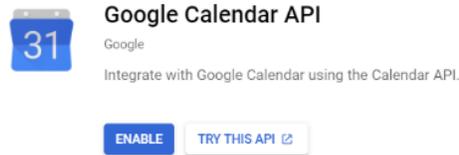


1. **Gmail API** – click *Enable*



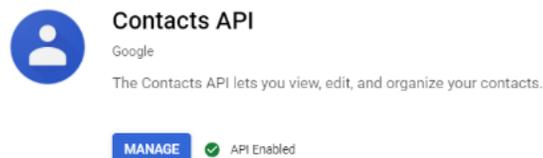
The Gmail API card features the Gmail logo on the left. To the right, the text reads 'Gmail API' followed by 'Google' in smaller text. Below that is the description: 'Flexible, RESTful access to the user's inbox'. At the bottom, there are three elements: a blue 'MANAGE' button, a white 'TRY THIS API' button with a link icon, and a green checkmark icon followed by the text 'API Enabled'.

2. **Google Calendar API** – click *Enable*



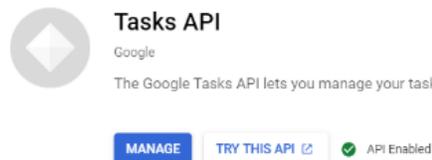
The Google Calendar API card features a calendar icon with the number '31' on the left. To the right, the text reads 'Google Calendar API' followed by 'Google' in smaller text. Below that is the description: 'Integrate with Google Calendar using the Calendar API'. At the bottom, there are two elements: a blue 'ENABLE' button and a white 'TRY THIS API' button with a link icon.

3. **Contacts API** - click *Enable*



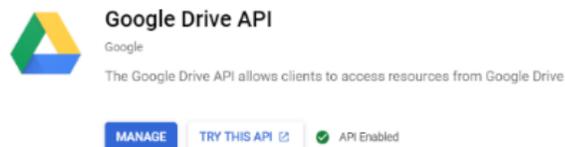
The Contacts API card features a person icon on the left. To the right, the text reads 'Contacts API' followed by 'Google' in smaller text. Below that is the description: 'The Contacts API lets you view, edit, and organize your contacts.' At the bottom, there are two elements: a blue 'MANAGE' button and a green checkmark icon followed by the text 'API Enabled'.

4. **Tasks API** - click *Enable*



The Tasks API card features a diamond icon on the left. To the right, the text reads 'Tasks API' followed by 'Google' in smaller text. Below that is the description: 'The Google Tasks API lets you manage your tasks and task lists.' At the bottom, there are three elements: a blue 'MANAGE' button, a white 'TRY THIS API' button with a link icon, and a green checkmark icon followed by the text 'API Enabled'.

5. **Google Drive API** - click *Enable*



The Google Drive API card features the Google Drive logo on the left. To the right, the text reads 'Google Drive API' followed by 'Google' in smaller text. Below that is the description: 'The Google Drive API allows clients to access resources from Google Drive'. At the bottom, there are three elements: a blue 'MANAGE' button, a white 'TRY THIS API' button with a link icon, and a green checkmark icon followed by the text 'API Enabled'.

Confirm in the Dashboard that all five APIs are enabled:

The screenshot shows the Google APIs console dashboard for the project 'Transend Migrator 102120'. The URL is `console.developers.google.com/apis/dashboard?project=transend-migrator-102120`. The left sidebar contains navigation options: Dashboard, Library, Credentials, OAuth consent screen, Domain verification, and Page usage agreements. The main content area is titled 'APIs & Services' and includes a '+ ENABLE APIS AND SERVICES' link. It features two charts: 'Traffic' (showing 0.001/s) and 'Errors' (showing 0). Below the charts is a table with columns: Name, Requests, Errors (%), Latency, median (ms), and Latency, 95% (ms). The table lists the following APIs: Contacts API, Gmail API, Google Calendar API, Google Drive API, and Tasks API.

8. Click **Create Credentials > Service Account**

The screenshot shows the 'Create Credentials' dialog box in the Google APIs console. The URL is `console.developers.google.com/apis/credentials?project=transend-migrator-102120`. The dialog box has a title bar with '+ CREATE CREDENTIALS' and 'DELETE'. It contains a warning icon and the text 'Remember to...'. Below this, there are four options for creating credentials: 'API key' (Identifies your project using a simple API key to check quota and access), 'OAuth client ID' (Requests user consent so your app can access the user's data), 'Service account' (Enables server-to-server, app-level authentication using robot accounts), and 'Help me choose' (Asks a few questions to help you decide which type of credential to use). The 'Service account' option is highlighted.

9. Enter Service Account Name: Transend

10. Click **Create**

← → ↻ console.developers.google.com/iam-admin/serviceaccounts/create?previo

Google APIs Transend Migrator 102120 Search for APIs and S

IAM & Admin Create service account

1 Service account details

Service account name
Transend
Display name for this service account

Service ac...
transend @transend-migrator-102120.iam.gserviceaccount.com X ↻

Service account description
migration
Describe what this service account will do

CREATE

11. Click **Manage service accounts**

Service Accounts [Manage service accounts](#)

<input type="checkbox"/>	Email	Name ↑	Usage with all services (last 30 days) 📊	
<input type="checkbox"/>	transend@transend-migrator-102120.iam.gserviceaccount.com	Transend	0	✎ 🗑

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12. Click dropdown **SHOW DOMAIN-WIDE DELEGATION**

The screenshot shows the Google Cloud IAM Admin console. The breadcrumb trail is 'IAM & Admin' > 'Transend'. The page title is 'Transend'. The 'Email' field contains 'transend@transend-migrator-102120.iam.gserviceaccount.com' and the 'Unique ID' field contains '100638195754583656547'. Under the 'Service account status' section, there is a green checkmark indicating 'Account currently active'. Below this, there are two buttons: 'DISABLE SERVICE ACCOUNT' and 'SHOW DOMAIN-WIDE DELEGATION' (which is expanded to show a dropdown menu).

13. Checkbox **Enable G-Suite Domain-wide Delegation**

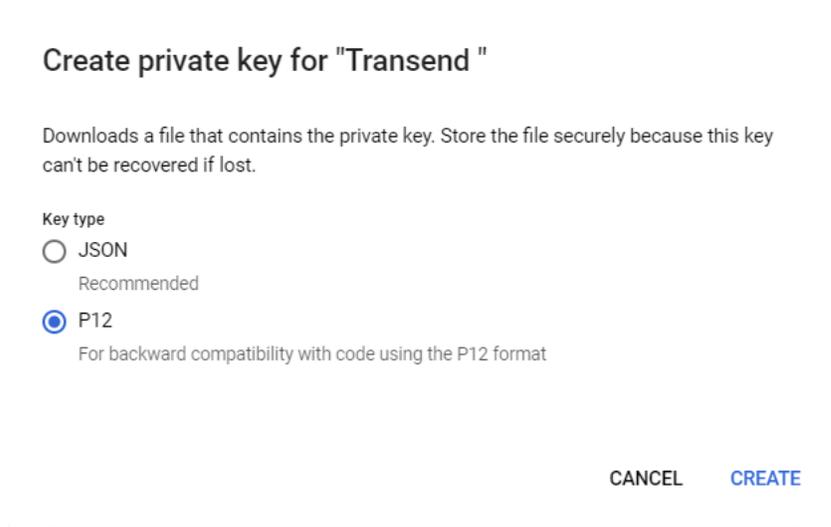
14. Enter **Transend Migrator** for product name for Consent Screen

15. Click **More > Create key**

The screenshot shows the Google Cloud IAM Admin console. The breadcrumb trail is 'IAM & Admin' > 'Service accounts'. The page title is 'Service accounts'. The 'Service accounts for project "Transend Migrator 102120"' section is active. Below this, there is a table with the following columns: 'Email', 'Status', 'Name', 'Description', 'Key ID', 'Key creation date', and 'Actions'. The table contains one row with the email 'transend@transend-migrator-102120.iam.gserviceaccount.com', status 'Active', name 'Transend', description 'migration', and key ID 'No keys'. The 'Actions' column for this row has a dropdown menu with options: 'Edit', 'Disable', 'Create key', and 'Delete'.

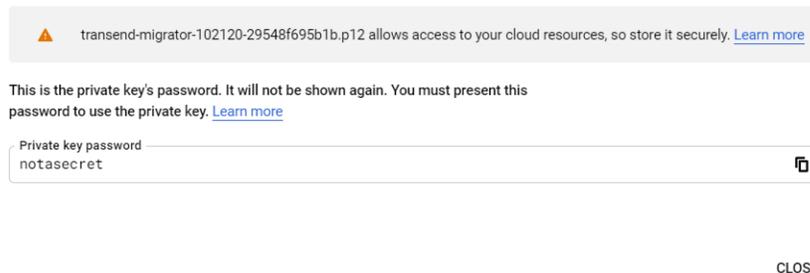
Email	Status	Name	Description	Key ID	Key creation date	Actions
transend@transend-migrator-102120.iam.gserviceaccount.com	Active	Transend	migration	No keys		Edit Disable Create key Delete

16. Change to .p12 key

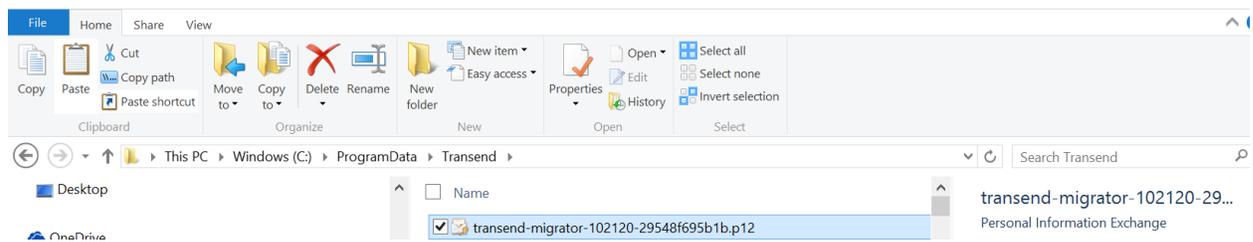


17. The .p12 key is downloaded to your Downloads folder.

Private key saved to your computer

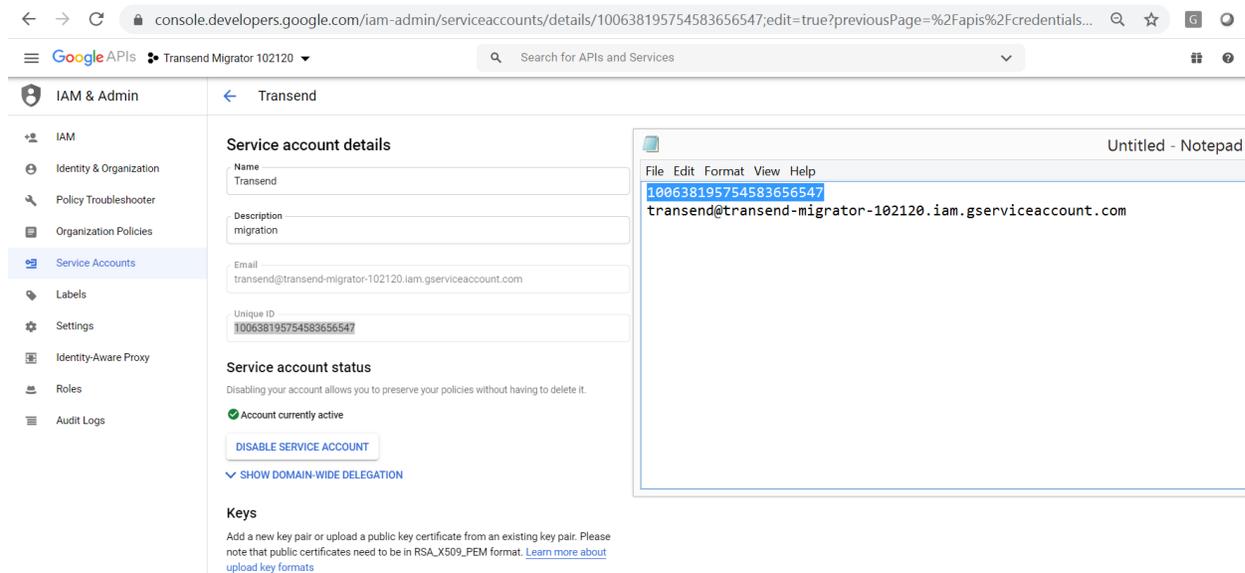


18. Copy the .p12 key to the migration machines c:\ProgramData\Transend



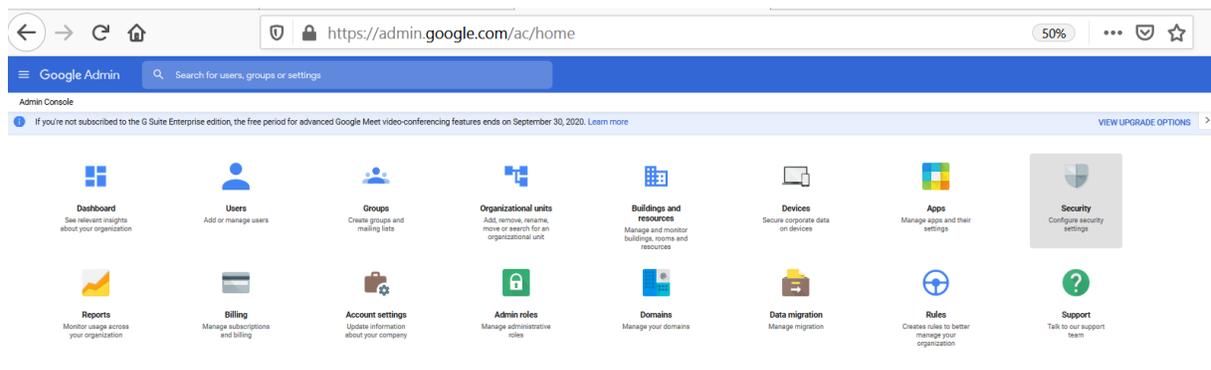
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19. Copy the service account email address and Key ID into notepad.

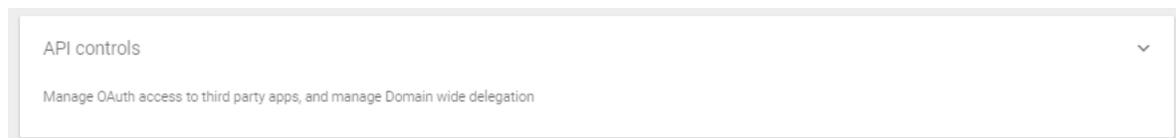


20. Open Google Admin Console: <https://admin.google.com>

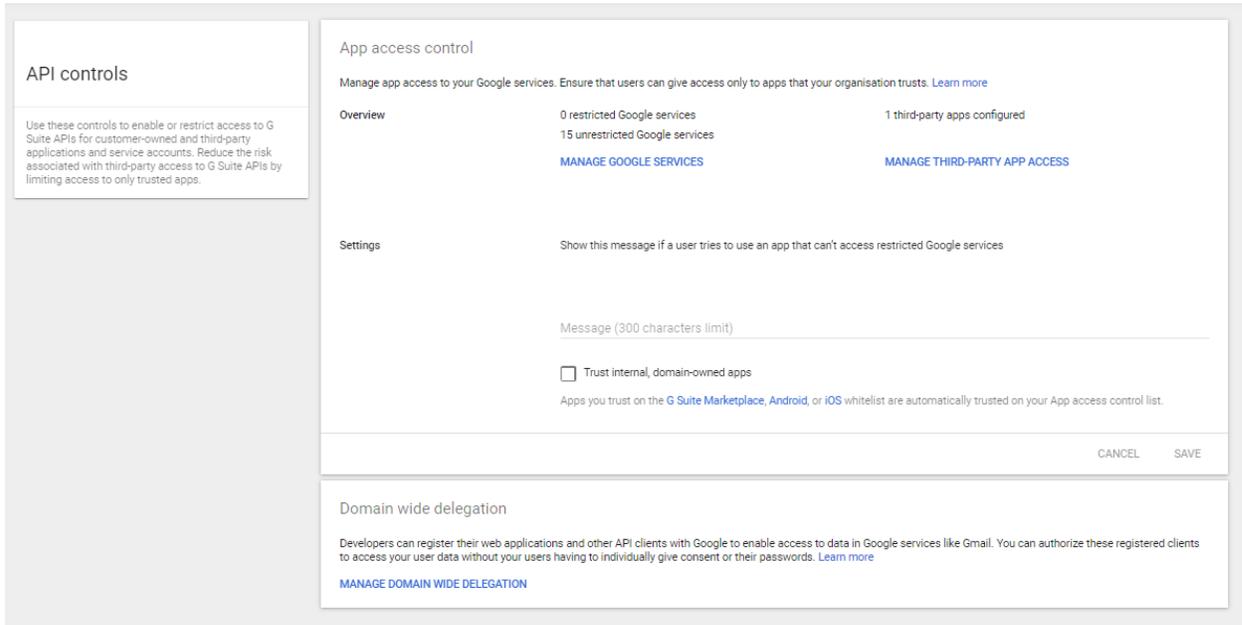
21. Click **Security**



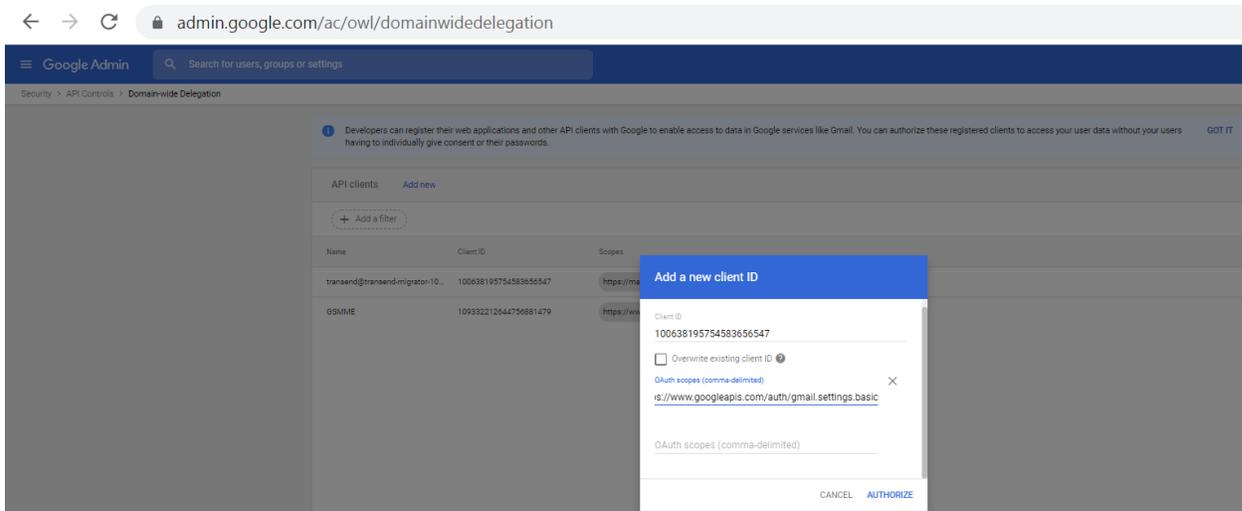
22. Click **API controls**



23. Click on **MANAGE DOMAIN WIDE DELEGATION**



24. Click **Add new**

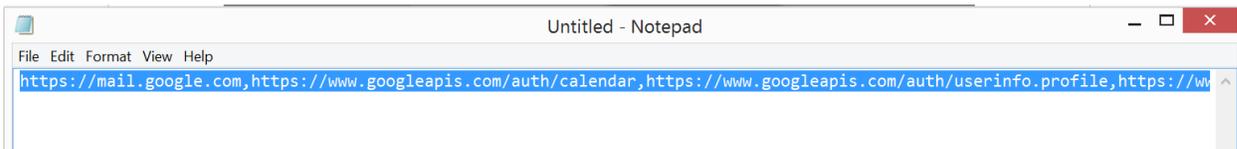


25. Client ID: 100638195754583656547

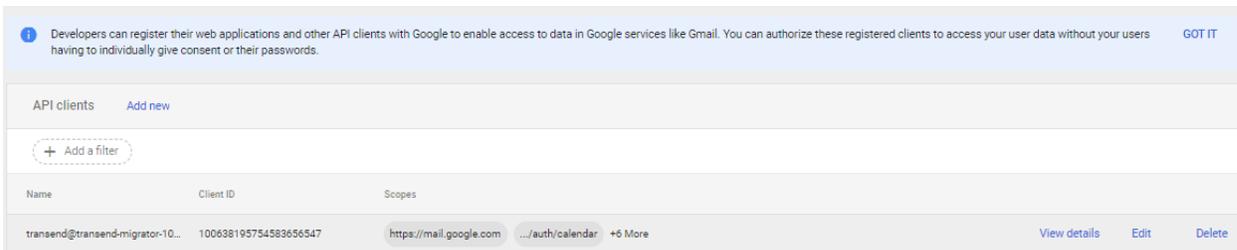
26. OAUTH Scopes:

Copy the following scopes into Notepad, into a single line comma delimited.

https://mail.google.com,https://www.googleapis.com/auth/calendar,https://www.googleapis.com/auth/userinfo.profile,https://www.googleapis.com/auth/contacts,https://www.googleapis.com/auth/tasks,https://www.googleapis.com/auth/gmail.labels,https://www.googleapis.com/auth/drive,https://www.googleapis.com/auth/gmail.settings.basic



27. Click **Authorize**



28. The G Suite Service Account is now setup and ready for use with Transend Migrator.

Last Updated: November 16, 2020