chrome enterprise

Chrome Browser Cloud Management's Takeout API Service Script

Table of Contents

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7. Click the Add key button, and select Create new key from the dropdown menu.
8. In the side panel that appears, select the format for your key: JSON is recommended.
9. Click Create. Your new public/private key pair is generated and downloaded to your machine; it serves as the only copy of this key.
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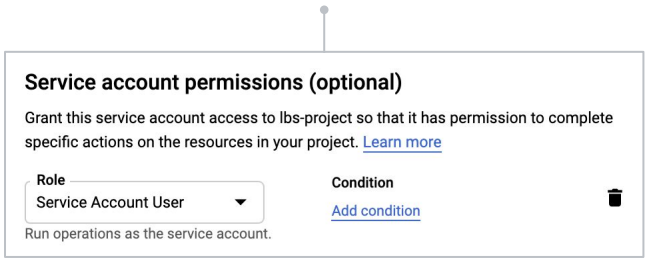

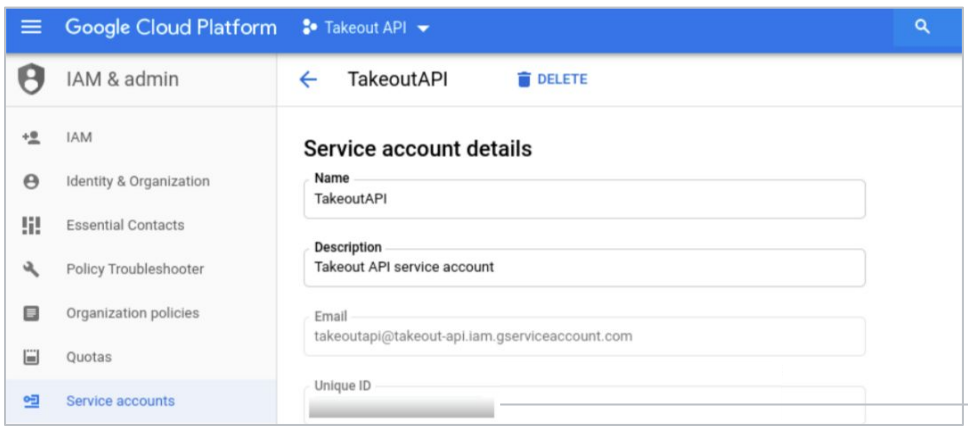

Adding the Scopes to your Google Admin Console

1. Open the Google admin console where you want to enable the API under Security>Access and data control>API controls>Domain wide delegation and click on Manage Domain Wide Delegation.
2. Click on the Add new button.
    1. On this page, the Client name corresponds to the Unique ID of your service account (gathered from step 11 in the previous section).
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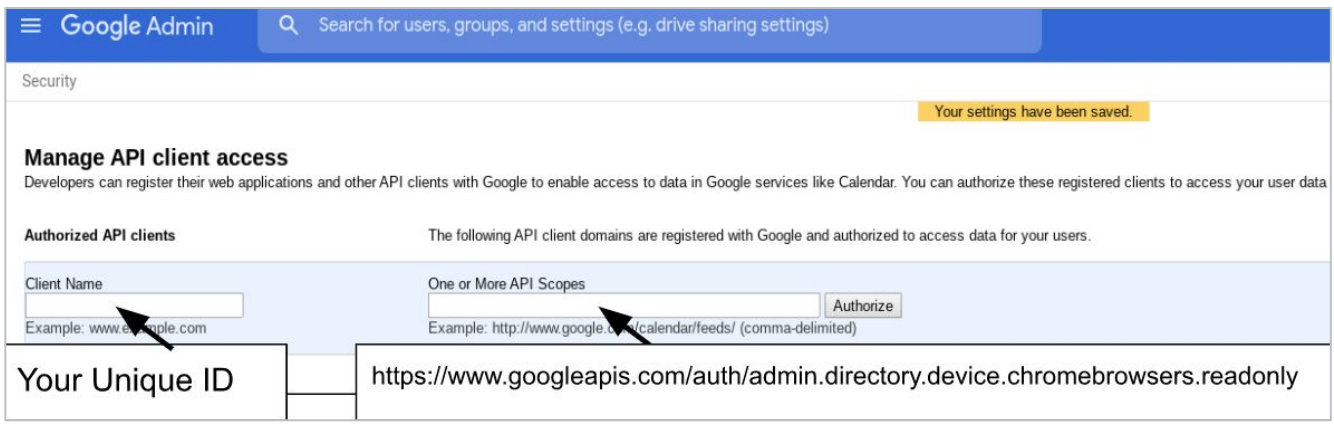


Note: The Google API library fully supports and tests on Python 3.4, 3.5, 3.6 and 3.7. This library may work on later versions of 3, but we do not currently run tests against those versions.

Running the Script on Chrome OS/Linux

Note: that you can ignore Step 1 if running directly on Linux.

- Python comes installed by default on the Chrome OS version of Linux.

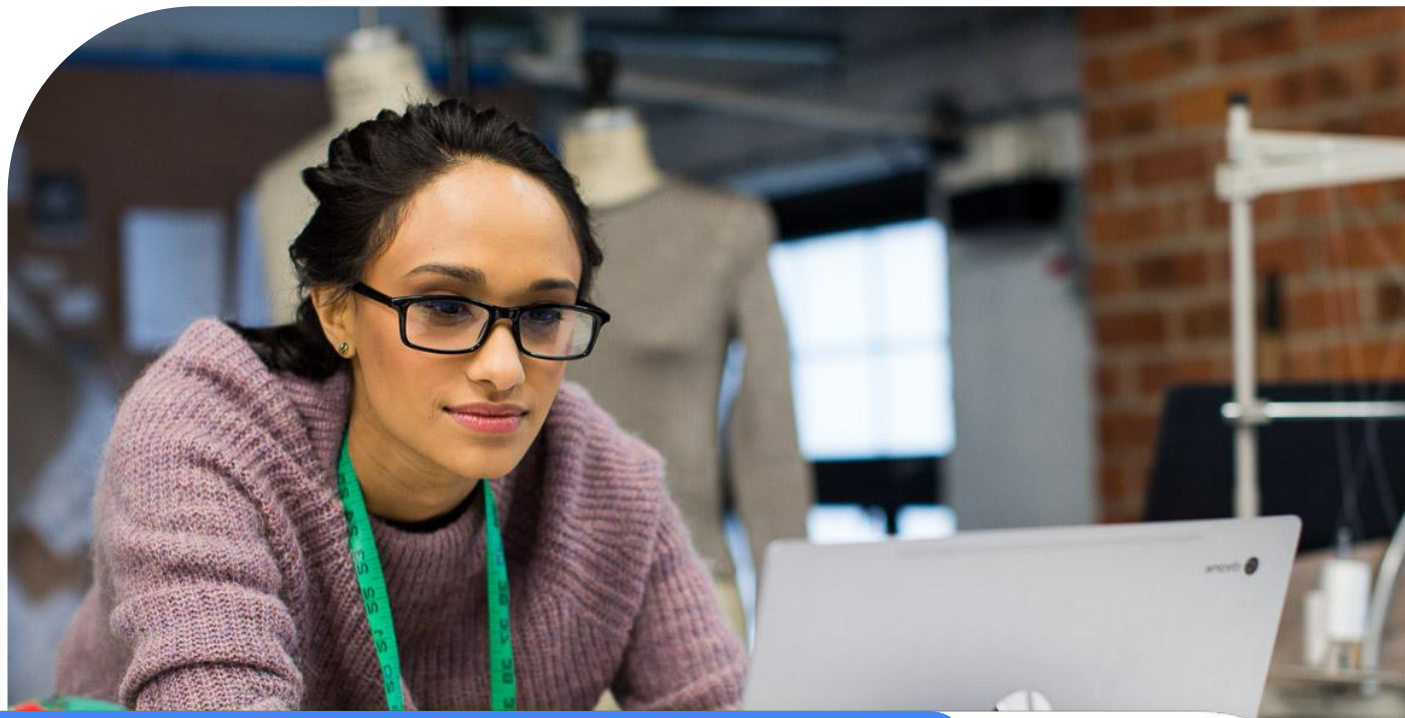
1. Open the Linux settings via the Chrome OS and activate the Linux Beta, and install it. More information is located here. It might take around ~1gb of space or more on your machine once Python is installed.
2. Type : sudo apt install python3-pip
3. pip3 install google-api-python-client (more instructions here)
4. Download the Service Account Key from your Google Developer Console and save it locally within your Linux folder.
5. Browse to the takeout script page, copy the text and save it in your Linux directory and rename the extension as .py
   - Linux users can download the script directly via this cmd
   - curl https://cs.chromium.org/codesearch/f/chromium/src/docs/enterprise/extension_query.py > extension_query.py
6. Run the following command replacing the sections in blue with the name of your key file and email address of your admin account that you enabled the admin SDK with.
   - python3 extension_query.py --service_account_key_path <yourkeyfilename>.json --admin_email <adminaccountname>@<yourdomain.com>
7. The output should be saved as extension_list.csv that you can open in Excel or Google Sheets.

Running the Script on Windows

1. Download the latest version of Python from their official site (if you don't already have it installed).
2. Run the installer (run as administrator).
   - Make sure that you select custom installation and select add python to environment variables if you want to run this via cmd line and make sure that install pip was selected.
3. Open an administrator cmd to verify that it was correctly installed by typing the cmd:
   - Python
   - Make sure that that you exit() to leave the python shell
4. Verify that PIP was correctly installed by typing the cmd : pip -v
5. Install the Google api library via typing the cmd:
   - pip install google-api-python-client
     - If you get a syntax error you need to leave the python shell via exit() and then retype in the normal cmd line interface.
6. Browse to the takeout script page, copy the text and save it as a .py file.
   - Download and place your keyfile in the same file location saved as a .json file.
7. Run the following command replacing the sections in blue with:
   1. The path to your key file and the .py script
   2. The name of your key file
   3. Email address of your admin account that you enabled the admin SDK with.
      - Python.exe <path to script>\extension_query.py --service_account_key_path <yourkeyfilename>.json --admin_email <adminaccountname>@<yourdomain.com>
8. The output should be saved as extension_list.csv that you can open in Excel or Google Sheets.

Running the Script on macOS

1. MacOS comes with Python pre installed but it can be out of date. To update it:
   - Go to Python.org downloads page and download the latest Python installer package.
   - Run the Python installer package and install Python 3 onto the Mac.
2. Open a Terminal window.
3. Run the following command to install pip3 on your Mac:
   - pip3
   - You will get prompted to install the command line developer tools. Click Install at the prompt and then Agree at the next pop up.
   - MacOS will automatically download and install the required software.
   - This may take a few minutes. When install is complete, click Done at the prompt.
4. Update pip3 to the latest version:
   - sudo pip3 install --upgrade pip
5. Run the command to install the python client for pip3:
   - sudo pip3 install google-api-python-client (more instructions here)
6. Download the Service Account Key <projectname.json> from your Google Developer Console and save it locally within your macOS folder.
7. Browse to the takeout script page, copy the text and save it as a .py file in your macOS directory. Make sure the file is in the same directory as your Service Account Key.
   - MacOS users can download the script directly via this Terminal cmd
   - curl https://cs.chromium.org/codesearch/f/chromium/src/docs/enterprise/extension_query.py > extension_query.py
8. Change the directory in Terminal to the download folder:
   - cd Downloads (if using a different folder, just navigate to the correct directory using the cd command)
9. Run the following command replacing the sections in blue with the name of your key file and email address of your admin account. This can be any Admin account in the domain that has the required privileges to view the browsers.
   - python3 extension_query.py --service_account_key_path <yourkeyfilename>.json --admin_email <adminaccountname>@<yourdomain.com>
10. The output should be saved as extension_list.csv that you can open in Excel or Google Sheets
    - Note, failure to change the directory in Terminal at step 8 will cause the file to be saved in the root folder of your user profile.



Reviewing the data

Here is an overview of the fields that are available in the output:

id	name	num_installed	num_disabled	num_forced
The Unique ID of the extension	The Name of the extension	The amount of times the extensions has been installed	Count of # of times the extension has been disabled by an admin	Count of # of times the extension has been Force installed by an admin

permissions	installed	disabled	forced	num_permissions
The rights that the extension requires to run as declared in the manifest	Which machines have the extension installed	Which machines have the extension disabled	Which machines have the extension forced	How many permissions does the extension require to run

Additional Command Line Arguments for the Script

The following additional command line arguments can be used to control the behavior of the script (these apply to all platforms):

- --extension_list_csv: You can can specify the exact output file location of the finished extension analysis.
- --max_browsers_to_process: This option will limit the number of browser details to fetch before the analysis calculations are done. Since each request to the server typically returns 100 results, the calculated result may return up to 100 more browsers than the specified argument.

Additional API support for Chrome Browser Cloud Management

Nearly every setting in the console has API support. For scaled management (like moving machines and making bulk changes), it is recommended as a best practice to set up the API to make life easier for admins in the console.

- For more information about how to setup the API in Chrome Browser Cloud Management, refer to this guide.
- The Chrome Enterprise also has a Github repository that provides tons of different scripts as well as a C# framework called CBCM-CSharp that you can use to learn, create, and solve complex use cases through automation and integration.
- It has example augments that can move browsers, delete out inactive browsers, pull information and more.
- It also has some helpful Powershell scripts to wake the browser and force updates and other useful Chrome Browser Cloud Management enrollment related scripts.

Slideyard

Google Cloud

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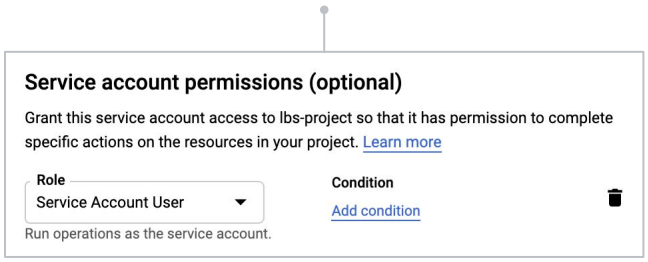

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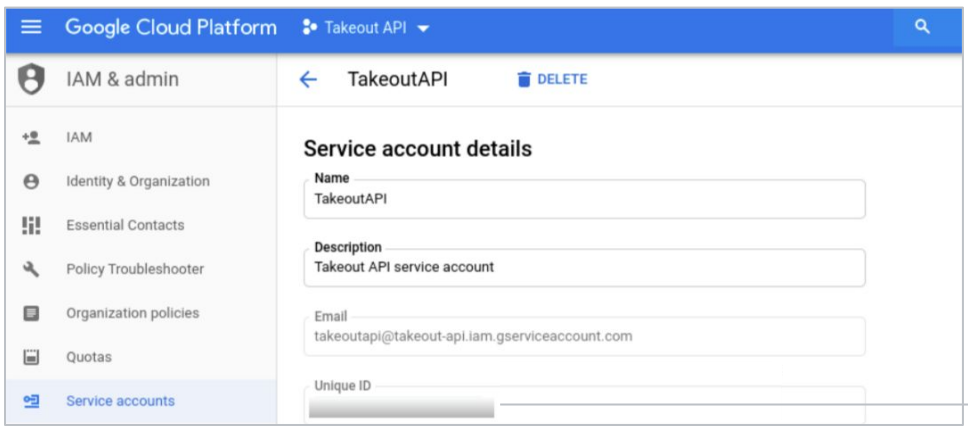

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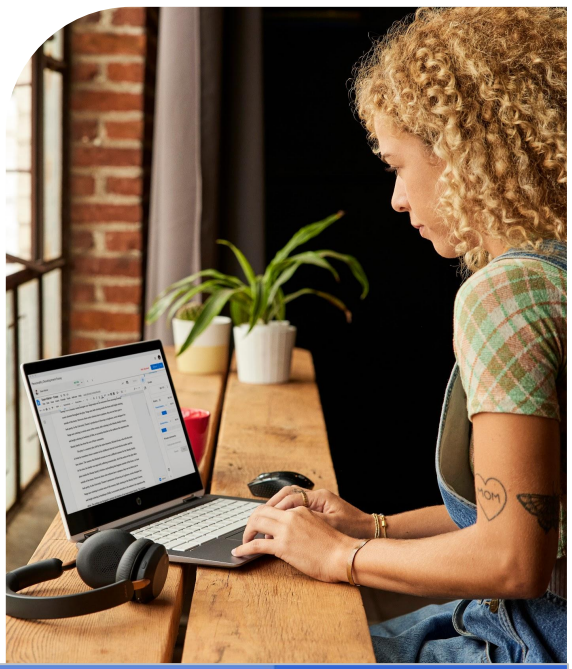

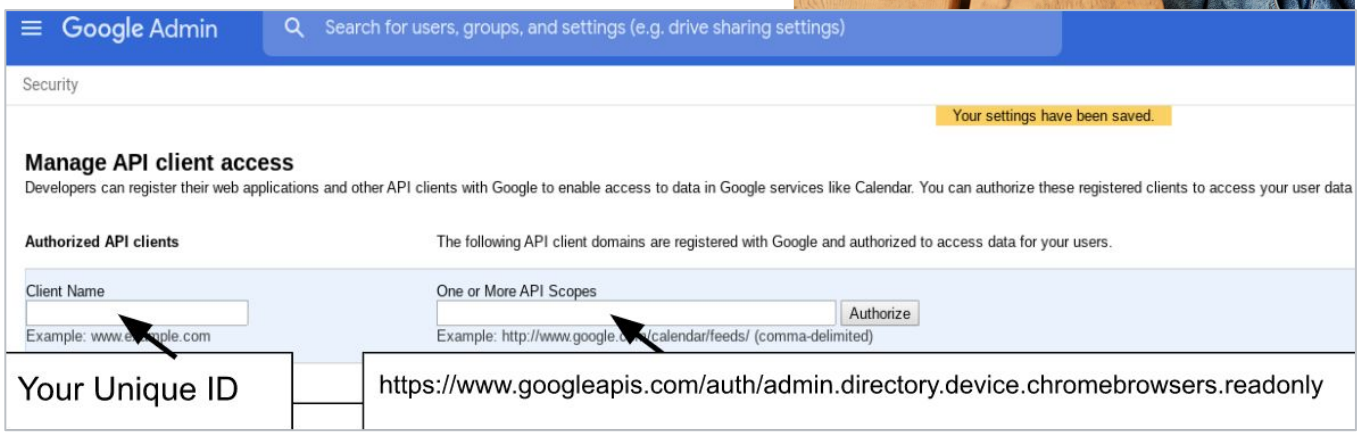

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