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# **google-music-scripts**

***Release 4.5.0***

**thebigmunch**

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## **LEGACY COMMANDS**

As of version **2.0.0**, google-music-scripts no longer installs the entry points for the legacy commands (`gmupload`, `gmdownload`, etc.). Use the `gms` command with subcommands instead.

As of version **4.0.0**, the `sync` commands are removed in favor of syncing options for the `download` and `upload` commands. These allow syncing based on the hash of the audio data (`'clientId'` on Google Music) and/or the metadata. Both sync options are enabled by default. This adds a dependency on the mobile API, so users will have to authenticate the Mobile Client on first run if they haven't previously done so through the Mobile API-based commands.







## CONFIGURATION

The configuration file uses the **TOML** format. It is located in the **user config directory** for your operating system with the app author being **thebigmunch** and app name being **google-music-scripts**. If the `-u`, `--username` option is given to a command, the configuration file from subdirectory **username** is used.

google-music-scripts allows configuration of option defaults using the defaults table. Use option long names (e.g. `device-id`, `uploader-id`) as the key. Defaults can be set for all commands, specific commands, or both with command-specific defaults taking precedence.

Use **device-id1** for all commands with `device-id` argument and **uploader-id1** for all commands with `uploader-id` argument:

```
[defaults]
device-id = "device-id1"
uploader-id = "uploader-id1"
```

Use **uploader-id2** for only the **upload** command:

```
[defaults.upload]
uploader-id = "uploader-id2"
```

Combine them to use **device-id1** for all commands with `device-id` argument, **uploader-id1** for all commands with `uploader-id` argument except **upload**, and **uploader-id2** for the **upload** command:

```
[defaults]
device-id = "device-id1"
uploader-id = "uploader-id1"

[defaults.upload]
uploader-id = "uploader-id2"
```







## **FILTERING**

### **3.1 Metadata**

Some gms commands allow filtering results based on song metadata (`-f`, `--filter`). The syntax is as follows:

- `+field[value]` to include filter condition.
- `-field[value]` to exclude filter condition.
- Multiple filters can be set in one call: `-f +field[value] -f +field2[value2]`
- Multiple conditions can be chained in one filter: `+field[value]+field2[value2]-field3[value3]`.
- Values can be valid Python regex.
- Matching is done case-insensitively.
- For convenience, a single or first condition can leave off the `+`, but not `-`.

#### **Examples:**

- `gms download -f 'artist[Beck]+album[Guero]-title[E-Pro]'` would download all songs by Beck from the album Guero without E-Pro in the title.
- `gms download -f 'artist[Beck]+album[Guero]-title[E-Pro]' -f 'artist[Daft Punk]'` would download all songs by Beck from the album Guero without E-Pro in the title as well as all songs by Daft Punk.

### **3.2 Dates**

Some gms commands allow filtering results based on creation/modification times. The following options are available:

- `--created-in/--modified-in` to include results from year or year/month.
- `--created-on/--modified-on` to include results from date.
- `--created-before/--modified-before` to include results from before datetime.
- `--created-after/--modified-after` to include results from after datetime.

The format supported follows ISO 8061 with the ability to use partial datetimes. A regex test is found [here](#).

#### **Examples:**

- `gms upload --created-in 2019` would upload files created in 2019.
- `gms upload --created-in 2019-02` would upload files created in February 2019.



- `gms download --created-on 2019-02-04` would download songs uploaded to Google Music on February 4th, 2019.
- `gms download --created-before 2019` would download songs uploaded to Google Music before 2019 (i.e. 2018 or earlier).
- `gms download --created-after '2019-02-04 12:00:00` would download songs uploaded to Google Music after 12 noon (UTC) on February 4th, 2019.
- `gms delete --created-after '2019-02-04 12:00:00-05:00` would delete songs uploaded to Google Music after 12 noon (GMT-5:00) on February 4th, 2019.



## OUTPUT TEMPLATES

The `download` command supports defining an output template. An output template uses patterns, as described below, to use values from metadata fields in the output. If a field for a pattern does not exist in the song, the pattern remains in the download filepath.



Pattern	Fields
%album%	<ul style="list-style-type: none"> <li>album</li> </ul>
%albumartist%	<ul style="list-style-type: none"> <li>albumartist</li> <li>album_artist</li> <li>albumArtist</li> </ul>
%artist%	<ul style="list-style-type: none"> <li>artist</li> </ul>
%date%	<ul style="list-style-type: none"> <li>date</li> </ul>
%disc%	<ul style="list-style-type: none"> <li>discnumber</li> <li>disc_number</li> <li>discNumber</li> </ul>
%disc2%	<ul style="list-style-type: none"> <li>discnumber</li> <li>disc_number</li> <li>discNumber</li> </ul> (zero-padded)
%discnumber%	<ul style="list-style-type: none"> <li>discnumber</li> <li>disc_number</li> <li>discNumber</li> </ul>
%discnumber2%	<ul style="list-style-type: none"> <li>discnumber</li> <li>disc_number</li> <li>discNumber</li> </ul> (zero-padded)
%genre%	<ul style="list-style-type: none"> <li>genre</li> </ul>
%title%	<ul style="list-style-type: none"> <li>title</li> </ul>
%track%	<ul style="list-style-type: none"> <li>tracknumber</li> <li>track_number</li> <li>trackNumber</li> </ul>
%track2%	<ul style="list-style-type: none"> <li>tracknumber</li> <li>track_number</li> <li>trackNumber</li> </ul> (zero-padded)
%tracknumber%	<ul style="list-style-type: none"> <li>tracknumber</li> <li>track_number</li> <li>trackNumber</li> </ul>
%tracknumber2%	<ul style="list-style-type: none"> <li>tracknumber</li> <li>track_number</li> <li>trackNumber</li> </ul> (zero-padded)



**Examples:**

- %track% - %title%
- %artist%/%album%/%track2% - %title%







## **TRANSCODING - FFMPEG/AVCONV**

Non-MP3 files require ffmpeg or avconv to be in your PATH to transcode them to MP3 for upload

Google Music requires an audio sample be sent for most uploads. ffmpeg/avconv is used for this as well unless the `--no-sample` option is given. In this case, an empty audio sample is sent. If uploading MP3s, ffmpeg/avconv is not required with `--no-sample`.







## **ALIASES**

Some commands have shorter aliases to limit the necessary typing in the terminal.

Command	Alias
delete	del
download	down
upload	up







## COMMAND-LINE INTERFACE

Use `-h`, `--help` to display the help for any command.

A collection of scripts to interact with Google Music.

### 7.1 Options

**`-V, --version`**      Output version.

### 7.2 Commands

**`<command>`**      Possible choices: delete, del, download, down, quota, search, upload, up

### 7.3 Sub-commands:

#### 7.3.1 delete (del)

Delete song(s) from Google Music.

```
gms delete [OPTIONS]
```

#### Options

**`-V, --version`**      Output version.



## Action

<b>-n, --dry-run</b>	Output results without taking action.
<b>-y, --yes</b>	Don't ask for confirmation.

## Logging

<b>-v, --verbose</b>	Increase verbosity of output.
<b>-q, --quiet</b>	Decrease verbosity of output.
<b>--debug</b>	Output log messages from dependencies.
<b>--log-to-stdout</b>	Log to stdout.
<b>--no-log-to-stdout</b>	Don't log to stdout.
<b>--log-to-file</b>	Log to file.
<b>--no-log-to-file</b>	Don't log to file.

## Identification

<b>-u, --username</b>	Your Google username or e-mail address. Used to separate saved credentials.
<b>--device-id</b>	A mobile device id.

## Filter

<b>-f, --filter</b>	Metadata filters. Can be specified multiple times.
<b>--created-in</b>	Include items created in year or year/month.
<b>--created-on</b>	Include items created on date.
<b>--created-before</b>	Include items created before datetime.
<b>--created-after</b>	Include items created after datetime.
<b>--modified-in</b>	Include items created in year or year/month.
<b>--modified-on</b>	Include items created on date.
<b>--modified-before</b>	Include items modified before datetime.
<b>--modified-after</b>	Include items modified after datetime.

### 7.3.2 download (down)

Download song(s) from Google Music.

```
gms download [OPTIONS]
```



## Options

**-V, --version**      Output version.

## Action

**-n, --dry-run**      Output results without taking action.

## Logging

**-v, --verbose**      Increase verbosity of output.  
**-q, --quiet**      Decrease verbosity of output.  
**--debug**      Output log messages from dependencies.  
**--log-to-stdout**      Log to stdout.  
**--no-log-to-stdout**      Don't log to stdout.  
**--log-to-file**      Log to file.  
**--no-log-to-file**      Don't log to file.

## Identification

**-u, --username**      Your Google username or e-mail address. Used to separate saved credentials.  
**--uploader-id**      A unique id given as a MAC address (e.g. '00:11:22:33:AA:BB'). This should only be provided when the default does not work.  
**--device-id**      A mobile device id.

## Local

**--no-recursion**      Disable recursion when scanning for local files. Recursion is enabled by default.  
**--max-depth**      Set maximum depth of recursion when scanning for local files. Default is infinite recursion.  
**-xp, --exclude-path**      Exclude filepaths. Can be specified multiple times.  
**-xr, --exclude-regex**      Exclude filepaths using regular expressions. Can be specified multiple times.  
**-xg, --exclude-glob**      Exclude filepaths using glob patterns. Can be specified multiple times. Absolute glob patterns not supported.



## Filter

<b>-f, --filter</b>	Metadata filters. Can be specified multiple times.
<b>--created-in</b>	Include items created in year or year/month.
<b>--created-on</b>	Include items created on date.
<b>--created-before</b>	Include items created before datetime.
<b>--created-after</b>	Include items created after datetime.
<b>--modified-in</b>	Include items created in year or year/month.
<b>--modified-on</b>	Include items created on date.
<b>--modified-before</b>	Include items modified before datetime.
<b>--modified-after</b>	Include items modified after datetime.

## Sync

<b>--use-hash</b>	Use audio hash to sync songs.
<b>--no-use-hash</b>	Don't use audio hash to sync songs.
<b>--use-metadata</b>	Use metadata to sync songs.
<b>--no-use-metadata</b>	Don't use metadata to sync songs.

## Output

<b>-o, --output</b>	Output file or directory name which can include template patterns.
---------------------	--

## Include

<b>PATH</b>	Local paths to include songs from.
-------------	------------------------------------

## 7.3.3 quota

Get the uploaded song count and allowance.

```
gms quota [OPTIONS]
```

## Options

<b>-V, --version</b>	Output version.
----------------------	-----------------



## Logging

<b>-v, --verbose</b>	Increase verbosity of output.
<b>-q, --quiet</b>	Decrease verbosity of output.
<b>--debug</b>	Output log messages from dependencies.
<b>--log-to-stdout</b>	Log to stdout.
<b>--no-log-to-stdout</b>	Don't log to stdout.
<b>--log-to-file</b>	Log to file.
<b>--no-log-to-file</b>	Don't log to file.

## Identification

<b>-u, --username</b>	Your Google username or e-mail address. Used to separate saved credentials.
<b>--uploader-id</b>	A unique id given as a MAC address (e.g. '00:11:22:33:AA:BB'). This should only be provided when the default does not work.

### 7.3.4 search

Search a Google Music library for songs.

```
gms search [OPTIONS]
```

## Options

<b>-V, --version</b>	Output version.
----------------------	-----------------

## Action

<b>-y, --yes</b>	Don't ask for confirmation.
------------------	-----------------------------

## Logging

<b>-v, --verbose</b>	Increase verbosity of output.
<b>-q, --quiet</b>	Decrease verbosity of output.
<b>--debug</b>	Output log messages from dependencies.
<b>--log-to-stdout</b>	Log to stdout.
<b>--no-log-to-stdout</b>	Don't log to stdout.
<b>--log-to-file</b>	Log to file.
<b>--no-log-to-file</b>	Don't log to file.



## Identification

**--device-id**            A mobile device id.

## Filter

**-f, --filter**           Metadata filters. Can be specified multiple times.

## 7.3.5 upload (up)

Upload song(s) to Google Music.

```
gms upload [OPTIONS] [INCLUDE_PATH]...
```

## Options

**-V, --version**           Output version.

## Action

**-n, --dry-run**           Output results without taking action.

## Logging

**-v, --verbose**           Increase verbosity of output.  
**-q, --quiet**            Decrease verbosity of output.  
**--debug**                Output log messages from dependencies.  
**--log-to-stdout**        Log to stdout.  
**--no-log-to-stdout**     Don't log to stdout.  
**--log-to-file**          Log to file.  
**--no-log-to-file**       Don't log to file.

## Identification

**-u, --username**        Your Google username or e-mail address. Used to separate saved credentials.  
**--uploader-id**        A unique id given as a MAC address (e.g. '00:11:22:33:AA:BB'). This should only be provided when the default does not work.  
**--device-id**           A mobile device id.



## Local

<b>--no-recursion</b>	Disable recursion when scanning for local files. Recursion is enabled by default.
<b>--max-depth</b>	Set maximum depth of recursion when scanning for local files. Default is infinite recursion.
<b>-xp, --exclude-path</b>	Exclude filepaths. Can be specified multiple times.
<b>-xr, --exclude-regex</b>	Exclude filepaths using regular expressions. Can be specified multiple times.
<b>-xg, --exclude-glob</b>	Exclude filepaths using glob patterns. Can be specified multiple times. Absolute glob patterns not supported.

## Filter

<b>-f, --filter</b>	Metadata filters. Can be specified multiple times.
<b>--created-in</b>	Include items created in year or year/month.
<b>--created-on</b>	Include items created on date.
<b>--created-before</b>	Include items created before datetime.
<b>--created-after</b>	Include items created after datetime.
<b>--modified-in</b>	Include items created in year or year/month.
<b>--modified-on</b>	Include items created on date.
<b>--modified-before</b>	Include items modified before datetime.
<b>--modified-after</b>	Include items modified after datetime.

## Misc

<b>--delete-on-success</b>	Delete successfully uploaded local files.
<b>--no-sample</b>	Don't create audio sample with ffmpeg/avconv. Send empty audio sample.
<b>--album-art</b>	Comma-separated list of album art filepaths. Can be relative filenames and/or absolute filepaths.

## Sync

<b>--use-hash</b>	Use audio hash to sync songs.
<b>--no-use-hash</b>	Don't use audio hash to sync songs.
<b>--use-metadata</b>	Use metadata to sync songs.
<b>--no-use-metadata</b>	Don't use metadata to sync songs.



## Include

**PATH**                      Local paths to include songs from.